

The
Rollamo
1911

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To

GEORGE REINALD DEAN

an alumnus and professor
of the

Missouri School of Mines

this 1911 Rollamo is dedicated as a
token of our regard and
esteem.

THE 1911 ROLLAMO BOARD.

Greeting...



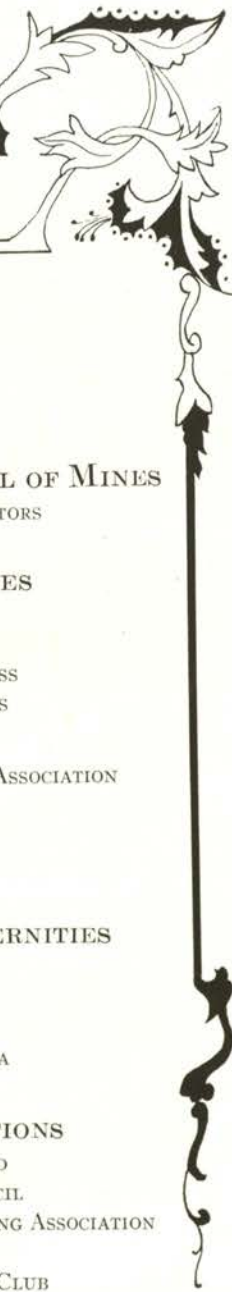
IN PRESENTING THIS the fifth "Rollamo" to its readers we feel not a little anxiety as to how it will be accepted. We can only say that, whatever are its faults, we have done our best.

We have tried not only to give you a retrospect of a year of college events but we have attempted to make this book something worthy of our Alma Mater. We have endeavored to instill into these pages something to show our reverence for her past, our hopes for her future.

And if, perchance, we have written here anything that will bring honor to her name, we shall feel that we have indeed succeeded in a task far too great for our meager abilities.



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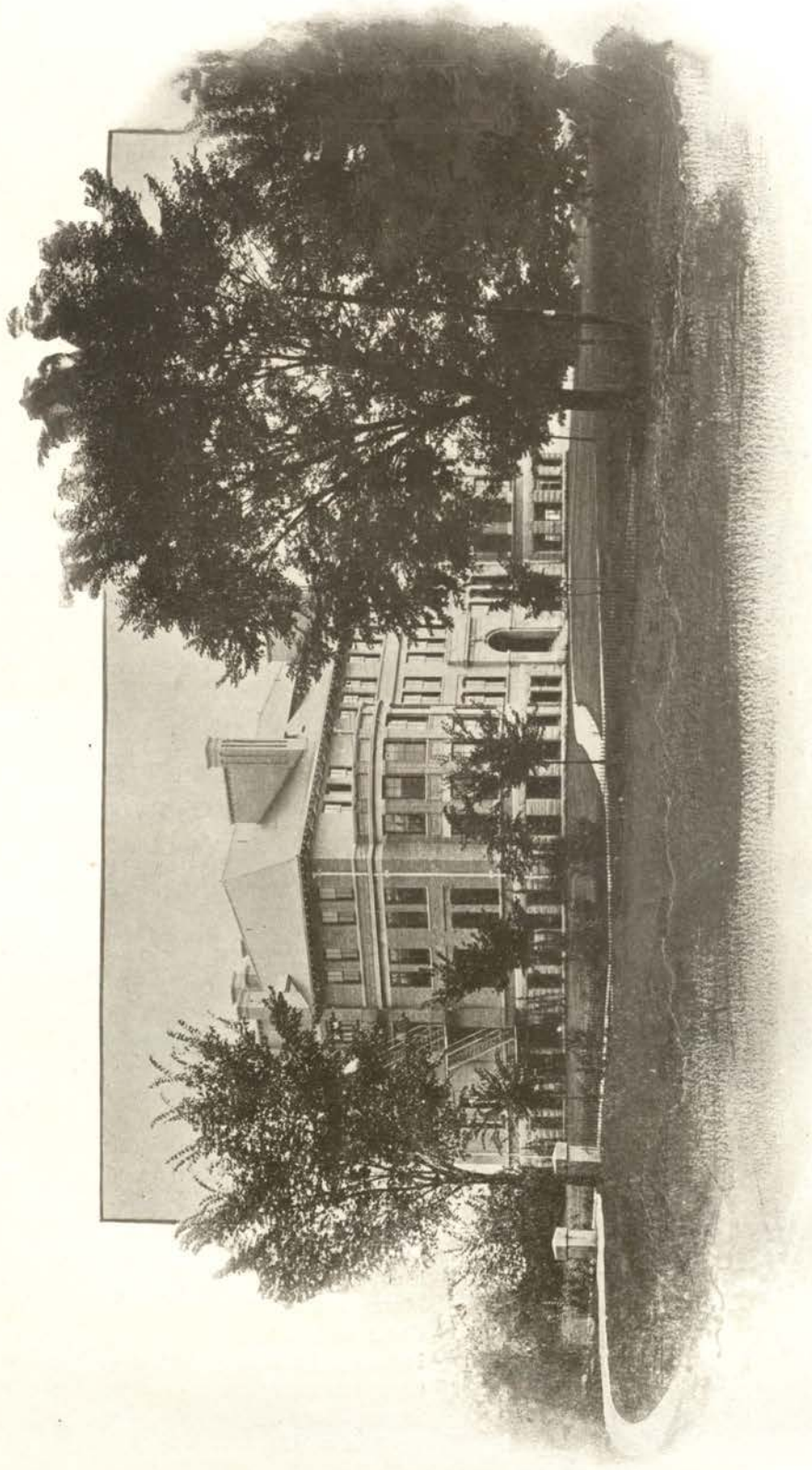
ROLLAMO BOARD
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ORCHESTRA
GRUBSTAKERS' CLUB
LUCKY STRIKE CLUB
R. WAY CLUB
Y. M. C. A.

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GREEN CAP DAY
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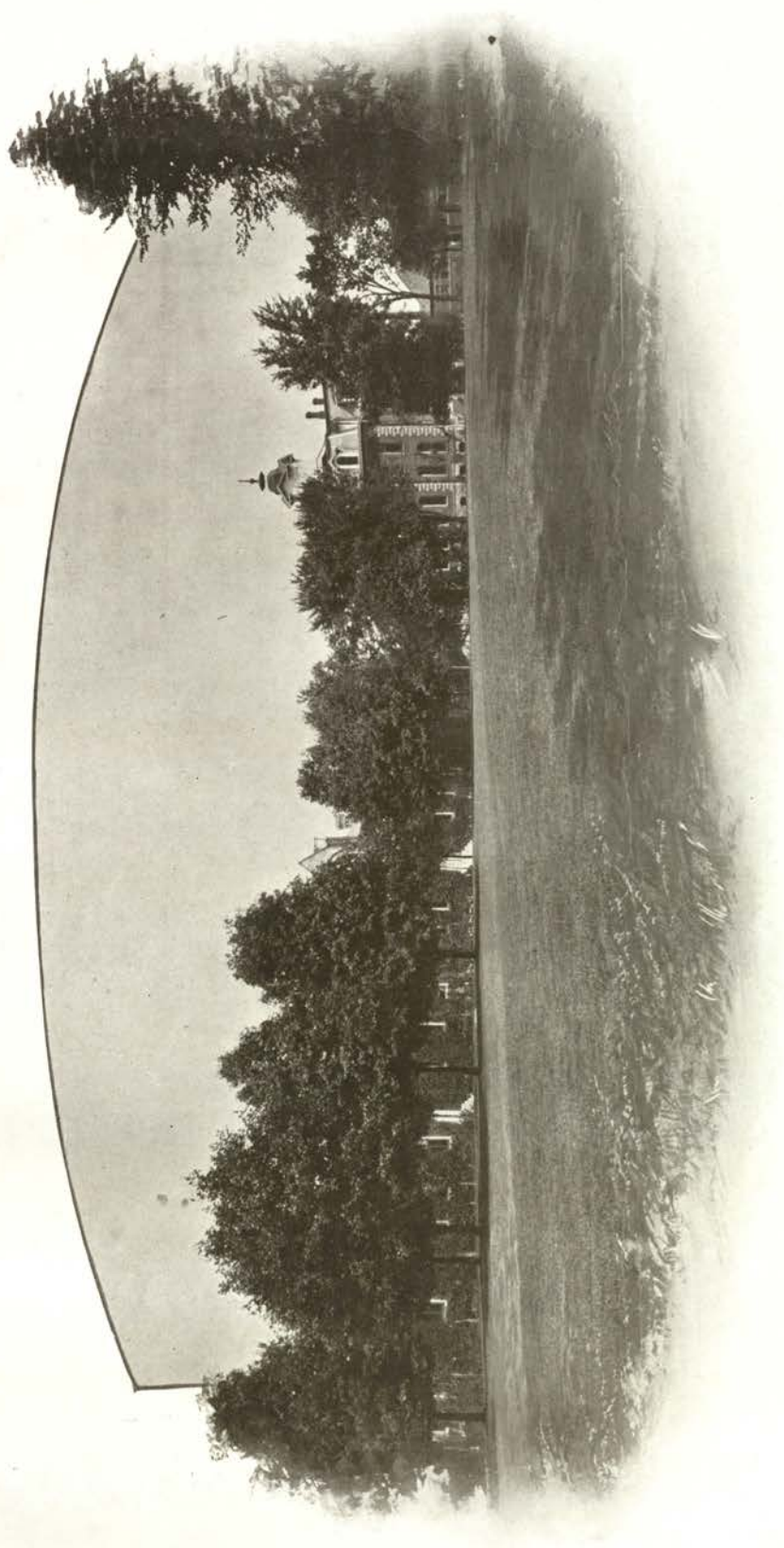
ALUMNI
ADVERTISEMENTS



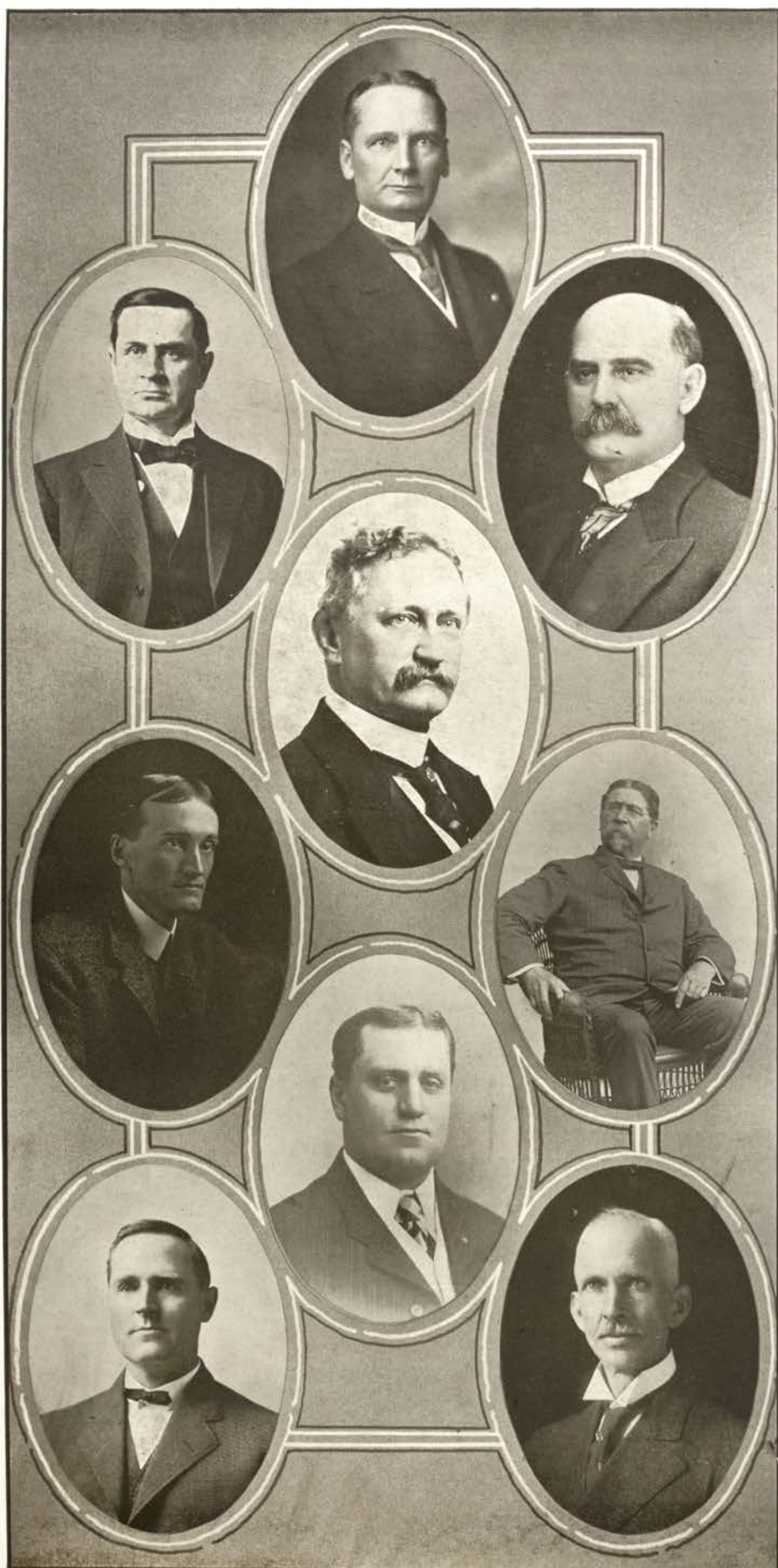
NORWOOD HALL

BOOK I.

THE SCHOOL OF MINES



CAMPUS VIEW





Board of Curators of the University

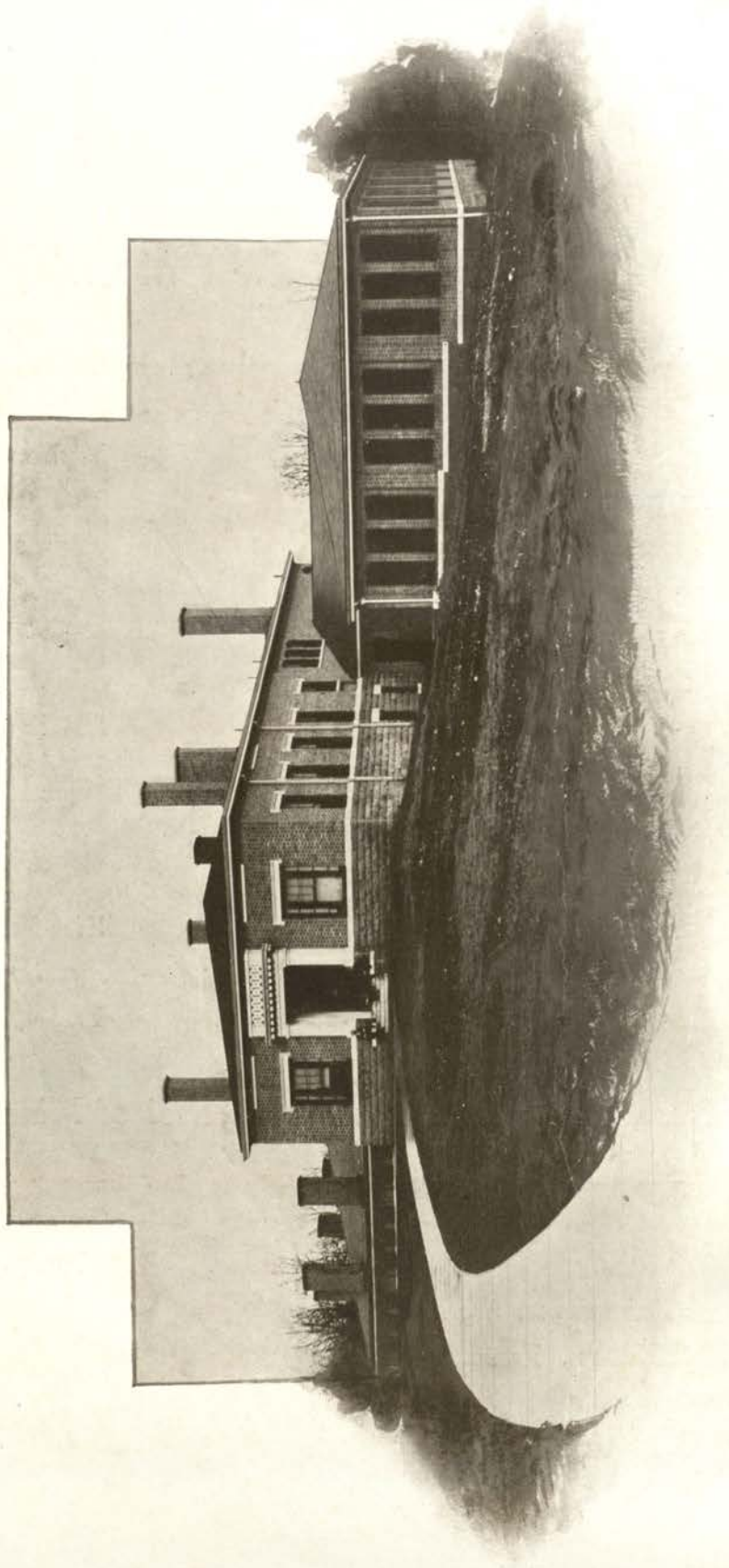
S. L. BAYSINGER	- - - - -	Rolla, Mo.
B. H. BONFOEY	- - - - -	Unionville, Mo.
P. E. BURTON	- - - - -	Joplin, Mo.
D. R. FRANCIS	- - - - -	St. Louis, Mo.
J. V. C. KARNES	- - - - -	Kansas City, Mo.
J. C. PARRISH	- - - - -	Vandalia, Mo.
C. B. ROLLINS	- - - - -	Columbia, Mo.
T. J. WORNALL	- - - - -	Liberty, Mo.
C. E. YEATER	- - - - -	Sedalia, Mo.

Officers of the Board

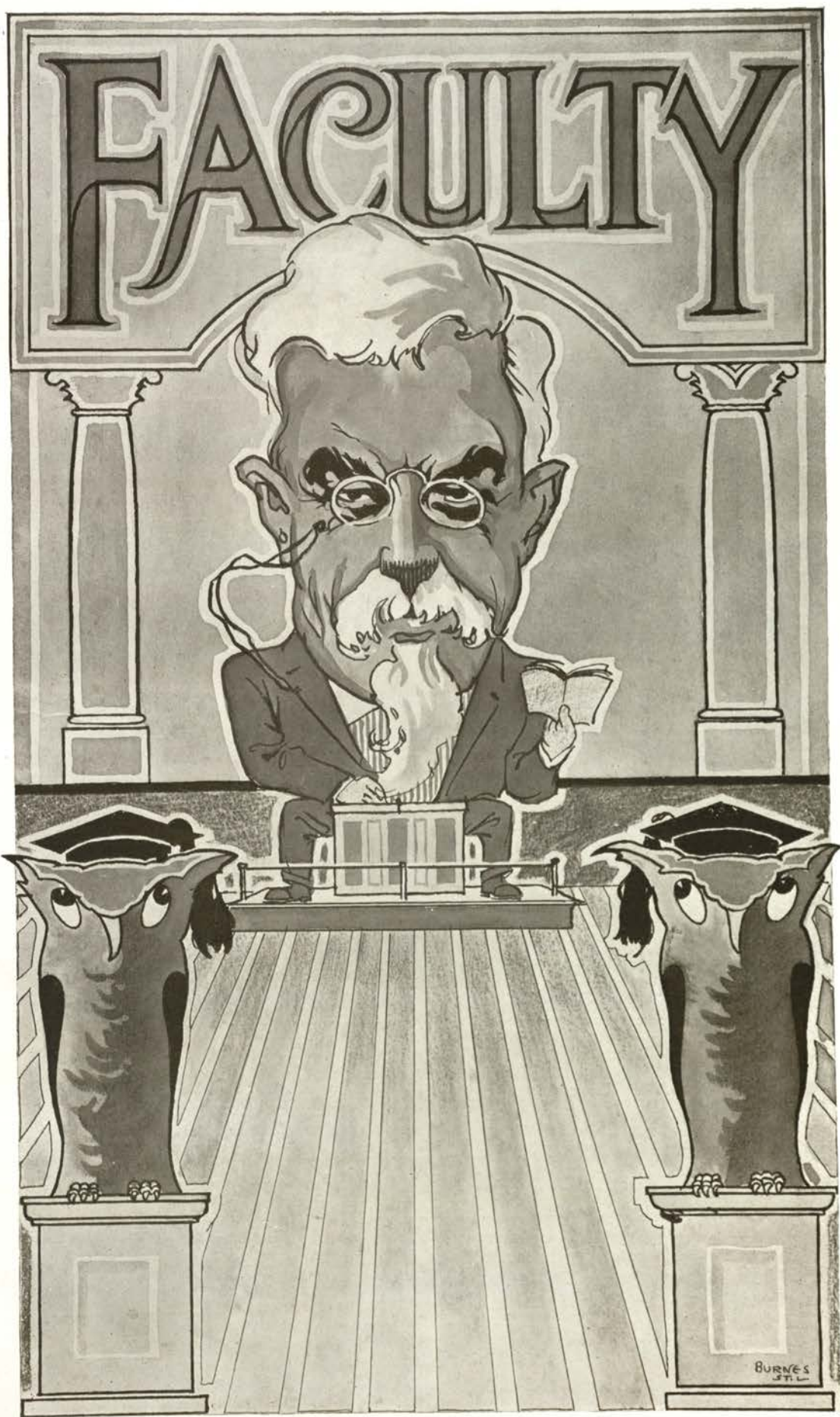
J. V. C. KARNES	- - - - -	<i>President</i>
D. R. FRANCIS	- - - - -	<i>Vice-President</i>
J. G. BABB	- - - - -	<i>Secretary</i>
R. B. PRICE	- - - - -	<i>Treasurer</i>

Executive Committee of the School of Mines

S. L. BAYSINGER, <i>Chairman</i>	- - - - -	Rolla, Mo.
P. E. BURTON	- - - - -	Joplin, Mo.
T. J. WORNALL	- - - - -	Liberty, Mo.
EDWARD KAHLBAUM, <i>Secretary</i>		
CHAS. M. KNAPP, <i>Treasurer</i>		



METALLURGY BUILDING





ALBERT ROSS HILL, PH. D., LL. D.

President of the University of Missouri.



LEWIS EMMANUEL YOUNG, B. S., E. M., T. S.

Director of the School of Mines and Metallurgy, Director of the Mining Experiment Station, and Professor of Mine Engineering.

Member American Mining Congress; Member Western Association of Technical Chemists and Metallurgists; Member Colorado Scientific Society; Member Society for Promotion of Engineering Education.

B. S., Pennsylvania State College, 1900; E. M., Iowa State College, 1904; Assistant Engineer, Pittsburg Coal Co., 1900; Instructor in Mining, Iowa State College, 1900-01; Assistant Geologist, Iowa Geological Survey, 1901; Mining Engineer with Champion Copper Co., Painesdale, Mich., 1902; Assistant Professor of Mining, Colorado School of Mines, 1903-04; Professor of Mining, Colorado School of Mines, 1904-07; Consulting Mining Engineer, Denver; Director of the School of Mines and Metallurgy, University of Missouri, 1907; Director of Mining Experiment Station, 1909.



**GEORGE REINALD DEAN, B. S.,
C. E., τ Φ Γ**

Professor of Mathematics.

Member American Mathematical Society; Member St. Louis Academy of Science.

C. E., Missouri School of Mines, 1890; B. S., 1891; Assistant in Mathematics, 1890-91; Professor of Mathematics, Maryville Seminary, 1891-92; Professor of Mathematics, Coe College, Iowa, 1892-93; Assistant in Leander McCormick Observatory, University of Virginia, 1893-94; Teacher of Mathematics, Central High School, Kansas City, Mo., 1894-97; Professor of Mathematics, Missouri School of Mines, 1897.

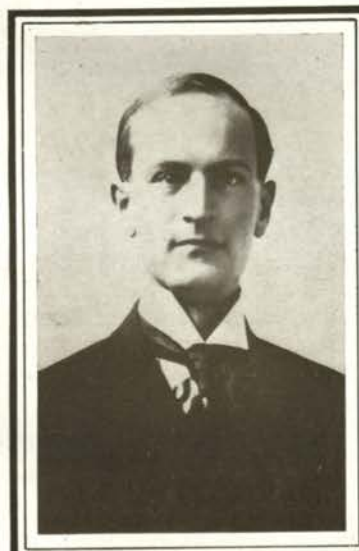


**AUSTIN LEE McRAE, B. S., S. D.,
X Φ , τ Φ Γ**

Professor of Physics.

Fellow American Association for the Advancement of Science.

B. S., University of Georgia, 1881; S. D., Harvard University, 1886; U. S. Signal Service (Electrical Work), 1882-89; U. S. Signal Service (Missouri State Weather Service) and Assistant Professor of Physics, University of Missouri, 1889-91; Professor of Physics, Missouri School of Mines, 1891-94; Associate Professor of Physics, University of Texas, 1894-96; Consulting Engineer, St. Louis, 1896-99; Professor of Physics, Missouri School of Mines, 1899.

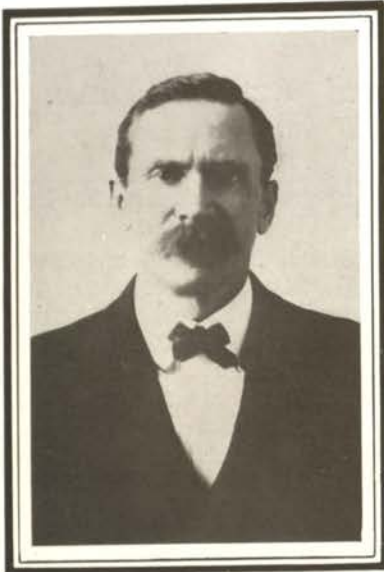


**VICTOR HUGO GOTTSCHALK, B. S.,
M. S., τ Φ Γ**

Professor of Chemistry.

Member American Association for the Advancement of Science; Member American Chemical Society; Member St. Louis Chemical Society; Member Western Association of Technical Chemists and Metallurgists.

B. S., Missouri School of Mines, 1898; Assistant U. S. Assayer, Kansas City, Mo., 1898-99; Assistant in Chemical Department, Marion-Sims Medical College, 1899; Assistant in Chemistry, Missouri School of Mines, 1899-1900; Instructor in Chemistry, 1900-01; Acting Professor of Chemistry, 1901; Student, University of Chicago, 1901; Cornell University, 1901-02; Professor of Chemistry, Missouri School of Mines, 1902.

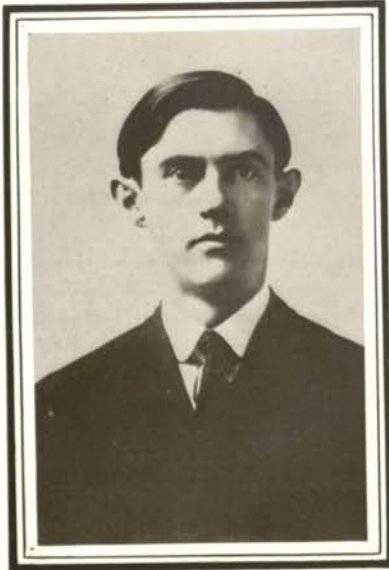


ELMO GOLIGHTLY HARRIS, C. E.

Professor of Civil Engineering.

Member American Society of Civil Engineers.

C. E., University of Virginia, 1882; Practical Civil Engineer, 1882-91; Director Missouri School of Mines, 1891-92; Professor of Civil Engineering, Missouri School of Mines, 1891-1901; Associate Professor of Civil Engineering, University of Pennsylvania, 1901-03; Professor of Civil Engineering, Missouri School of Mines, 1903.



DURWARD COPELAND, S. B., S. P., T.

Professor of Metallurgy.

S. B., Massachusetts Institute of Technology, 1903; Assistant to Professor H. O. Hofman and Instructor in Metallurgy, Massachusetts Institute of Technology, 1903-1904; Instructor in Metallurgy and Ore Dressing, Michigan College of Mines, 1904-07; Professor of Metallurgy, Missouri School of Mines, 1907.



JOSEPH HENRY BOWEN

Assistant Professor of Shopwork and Drawing.

Student, Miller School, Va., 1890-95; Rhode Island School of Design, 1896-97; Instructor in Shopwork and Drawing, Missouri School of Mines, 1902-06; Assistant Professor of Shopwork and Drawing, Missouri School of Mines, 1906.



LEON ELLIS GARRETT, B. S., T § ¶

Assistant Professor of Mathematics.

B. S., Missouri School of Mines, 1901; Assistant in Mathematics, 1901-03; Instructor in Mathematics, Missouri School of Mines, 1903-06; Assistant Professor of Mathematics, Missouri School of Mines, 1906.



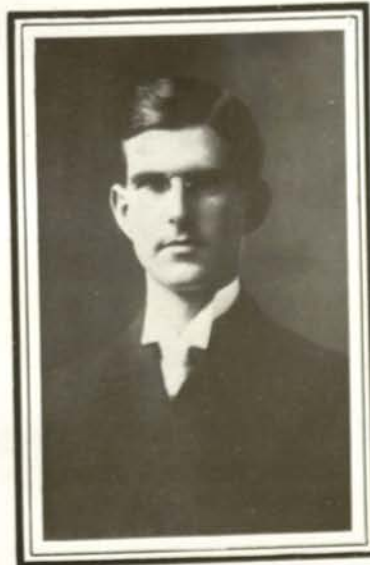
GUY HENRY COX, B. S., M. A.,

A X §, T § ¶

Assistant Professor of Geology and Mineralogy.

Member California Mining Association.

B. S., Northwestern University, 1905; M. A., University of Wisconsin, 1908; Graduate Student, School of Mines, University of California, 1905-06; Fellow in Geology, University of Wisconsin, 1907-08; Instructor in Geology, University of California, 1908-09; Assistant Professor of Mineralogy and Petrography, Missouri School of Mines, 1909.



CARROLL RALPH FORBES, B. S., E. M., § P, T § ¶

Assistant Professor of Mining.

B. S., Michigan College of Mines, 1902; E. M., 1903; Assistant in Mechanical Engineering, Michigan College of Mines, 1901-02; Assistant in Mining Engineering, 1902-03; Engineer of Victoria Copper Mining Co., Rockland, Michigan, 1903-06; Mining Engineer, Michigan Copper Mining Co., Rockland, Mich., 1906-07; Engineer, Nevada Smelting and Mines Corporation, Tonopah, Nev., 1907; Assistant Superintendent, Nevada Douglas Copper Co., Yerington, Nev., 1908; Graduate Student, Missouri School of Mines, 1908-09; Assistant Professor of Mining, Missouri School of Mines, 1909.



**LOUIS AGASSIZ TEST, B. S., A. C.,
PH. D., Σ Ξ , τ $\S$ η**

Assistant Professor of Chemistry.

Member American Chemical Society; Member American Association for the Advancement of Science; Member Copper Club; Member American Ornithologists' Union.

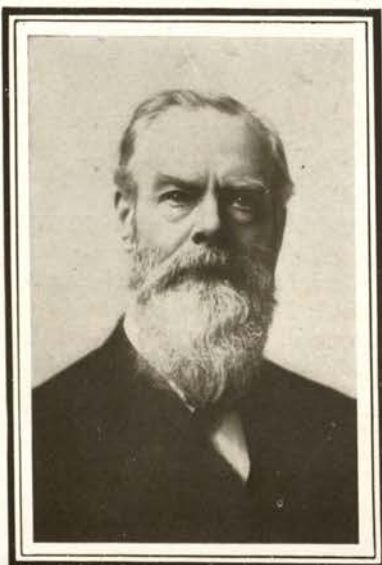
B. S. in Mechanical Engineering, Purdue University, 1894; A. C., 1896; Ph.D., University of Chicago, 1907; Graduate Student, University of Chicago, 1901-02; Assistant in Chemistry, Purdue University, 1896-97; Assistant Chemist, Colorado Agricultural Experiment Station, 1897-1901; Instructor in Chemistry, Purdue University, 1903-06; Professor of Chemistry, Occidental College, Los Angeles, Cal., 1907-09; Assistant Professor of Chemistry, Missouri School of Mines, 1909.



**JULIUS WOOSTER EGGLESTON, B. S.
A. M., Ψ Υ , Φ B K**

Assistant Professor of Geology and Mineralogy.

B. S., Amherst College, 1898; A. M., Harvard University, 1901; Instructor in Geology and Mineralogy, Colorado School of Mines, 1901-05; Assistant in Geology, Harvard University, 1905-08; Instructor in Geology, Harvard University, Summer School, 1906; Assistant in Economic Geology, Harvard University, 1909-10; Assistant Professor of Geology and Mineralogy, Missouri School of Mines, 1910.



PAUL JULIUS WILKINS, B. S.,

Instructor in Modern Languages.

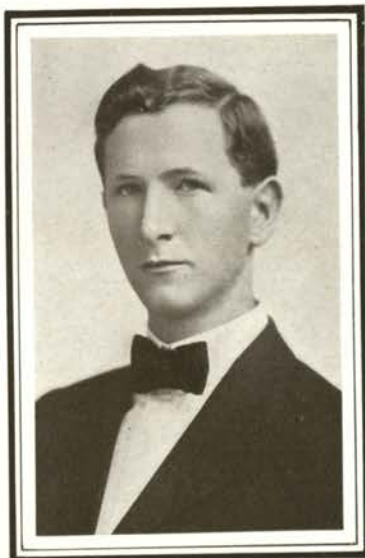
B. S., Michigan Agricultural and Mechanical College, 1869; Instructor in Modern Languages, Missouri School of Mines, 1887.



JOHN BENNETT SCOTT, B. S.

Instructor in English.

B. S., Missouri School of Mines, 1907; Instructor in English, Missouri School of Mines, 1897-.



BOYD DUDLEY, JR., B. S., M. S.

Instructor in Metallurgy and Ore Dressing.

B. S., in General Science, Missouri School of Mines, 1908; M. S., Missouri School of Mines, 1910; Instructor in Metallurgy and Ore Dressing, 1908-.



**HORACE THARP MANN, B. S. IN
E. M., M. S., E. M., Π Κ Α, Τ Φ Ψ**

Instructor in Metallurgy.

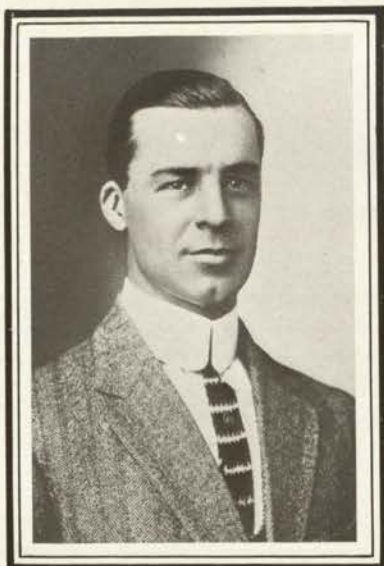
B. S., in Mining Engineering, Missouri School of Mines, 1908; M. S., Missouri School of Mines, 1909; E. M., Missouri School of Mines, 1910; Instructor in Metallurgy, 1908-.



J. TERRENCE McVEY, C. E.

Instructor in Civil Engineering.

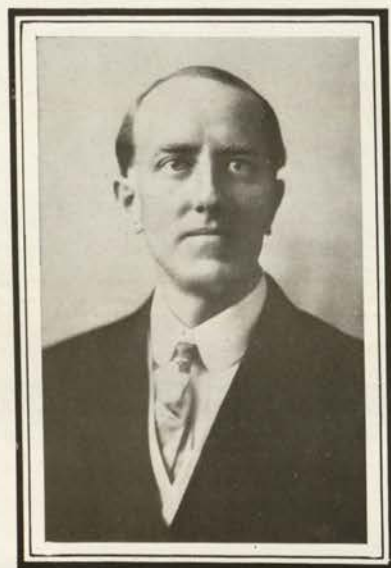
C. E., Lehigh University, 1906; Transitman, Delaware, Lackawanna and Western Railroad, 1906; Draftsman, Central of Georgia Railway, 1907; Instructor in Civil Engineering, Michigan Agricultural College, 1907-1909; Instructor in Missouri School of Mines, 1909-.



**FRANK EDWARD DENNIE, B. S. IN
C. E. Θ Δ Χ**

Instructor in Civil Engineering and Physical Training.

B. S. in C. E., Brown University, 1909; Instructor in Civil Engineering and Physical Training, Missouri School of Mines, 1909-.



**FREDERICK WILLIAM BUERSTATTE,
B. S. IN M. E.**

Instructor in Mechanical Drawing.

B. S. in M. E., University of Wisconsin, 1901; Apprentice, Mechanical Department, Chicago and Northwestern Railroad, 1901-05; Draftsman, Railway Appliances Co., 1905; Draftsman, Keystone Harvester Co., 1906; Chief Draftsman, Manchester Sargent Co., 1906-07; Chief Draftsman, American Well Works, 1907-09; Instructor in Mechanical Drawing, Missouri School of Mines, 1909-.



MEYER GABA, B. S., M. S.

Instructor in Mathematics.

Member American Association for the Advancement of Science; Member American Mathematical Society; Member Circolo Matematico di Palermo.

B. S., University of Chicago, 1907; M. S., University of Chicago, 1908; Instructor of Mathematics, University of Kansas, 1908-10; Instructor in Mathematics, Missouri School of Mines, 1910-.



VACHEL HARRY McNUTT, B. S.

Instructor in Mineralogy.

B. S., Missouri School of Mines, 1910; Instructor in Mineralogy, Missouri School of Mines, 1910-.



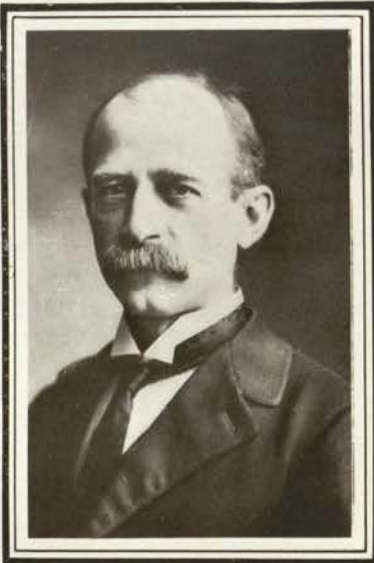
JOHN PERRY WALKER, JR.

Assistant in Chemistry.

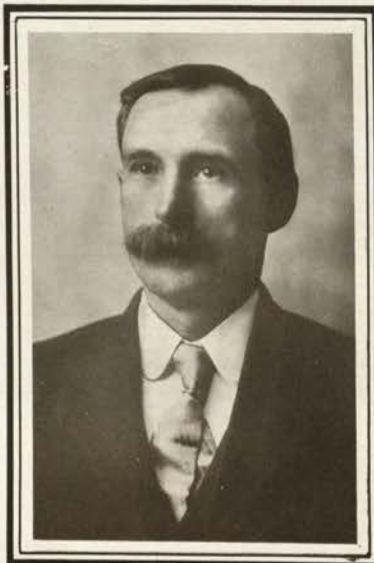
Student in School of Mines, 1899-1900; Chemist with American Car and Foundry Co., 1900; Assayer, Neihart, Mont., 1901; Assistant Chemist, Boston and Montana Consolidated Copper and Silver Mining Co., Great Falls, Mont., 1901-06; Chemist in charge of Electrolytic Laboratories, Boston and Montana Consolidated Copper and Silver Mining Co., 1906-09; Station Assistant, Missouri Mining Experiment Station, 1909-10; Assistant in Chemistry, Missouri School of Mines, 1910-.



IDA STEVENS GARRETT
Librarian.



EDWARD KAHLBAUM
Secretary of the Executive Committee and
Registrar.

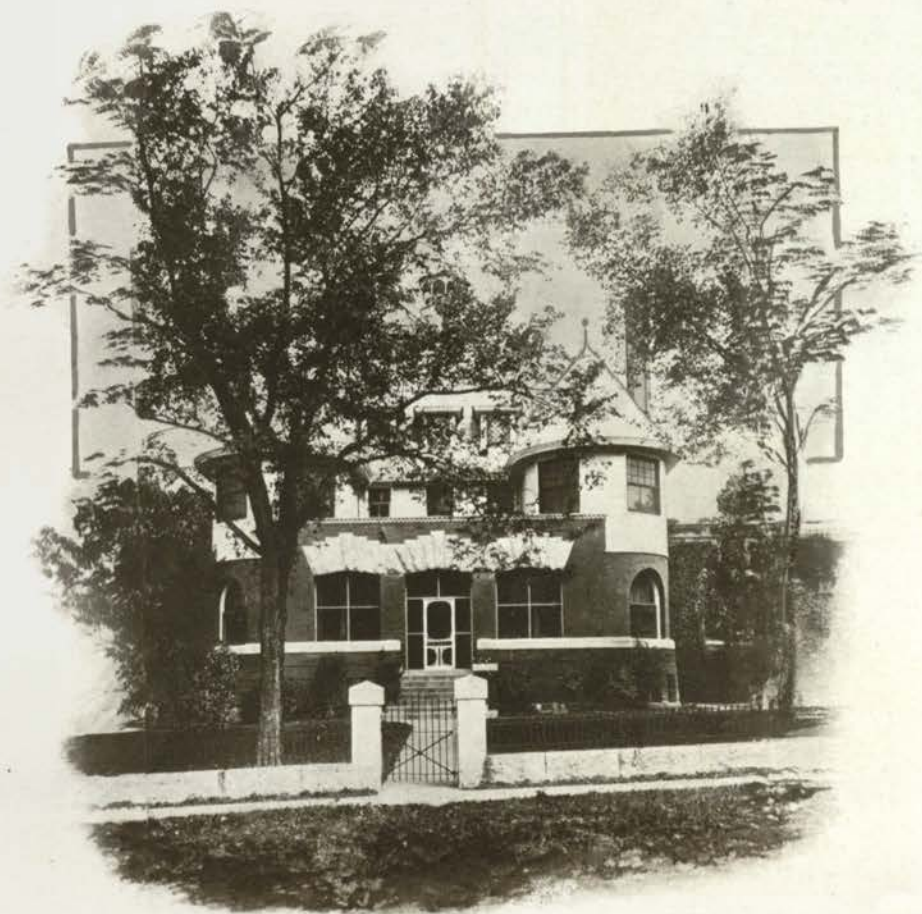


ROBERT R. DICKERSON
Superintendent of Buildings and Grounds.

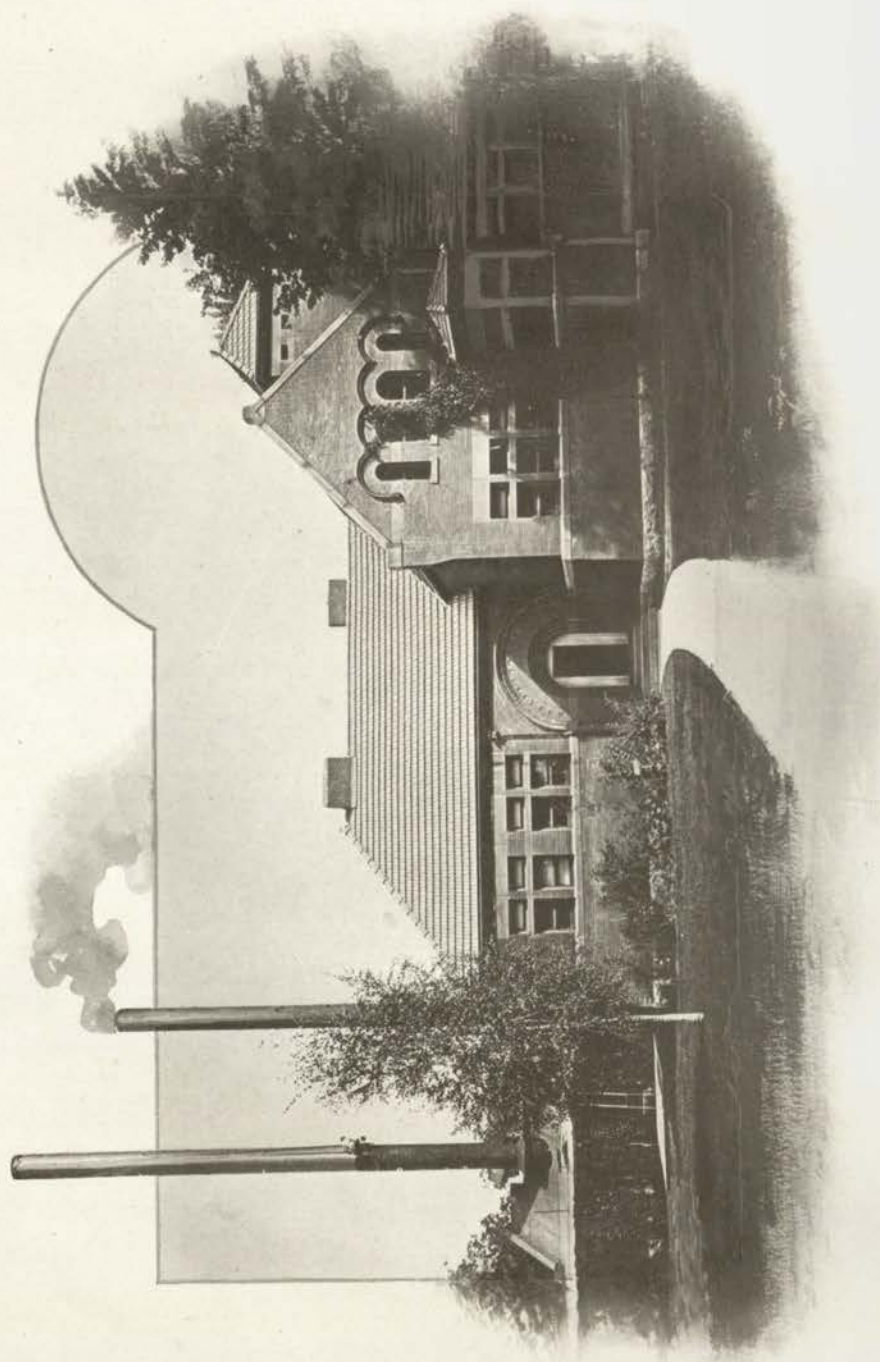


KATHERINE FLOSSIE WYNN
Stenographer.

*With all their faults
We love them still.*



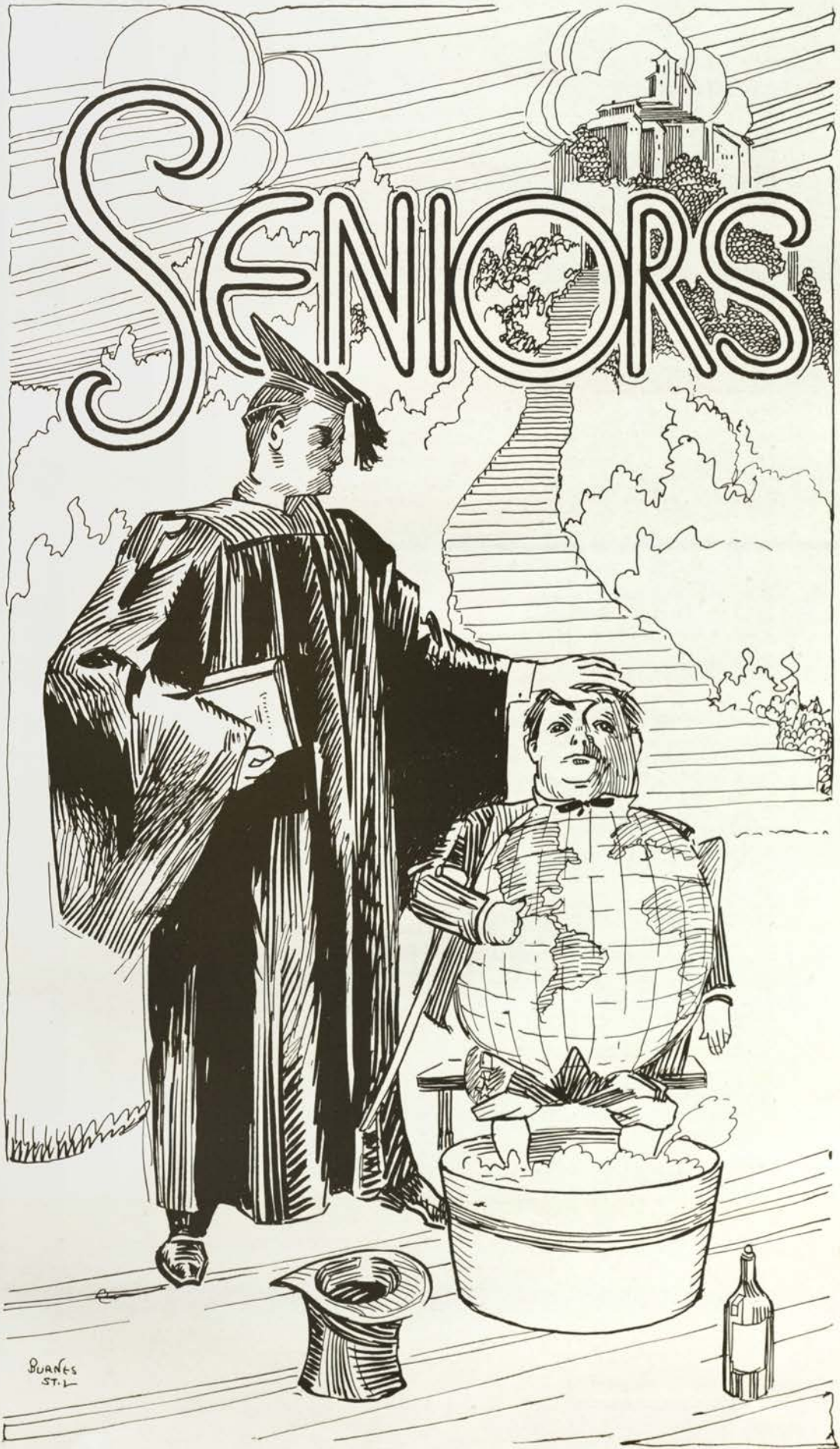
THE DIRECTOR'S RESIDENCE



MINING BUILDING

BOOK II.

THE CLASSES



Seniors



EDWARD REES ABBOTT,
MANSFIELD, OHIO

He sat and bleared his eyes with books.

Secretary Athletic Association, '11
Vice-President of Class, '11
Athletic Association, '08, '09, '10, '11

"Pete" probably has fewer enemies than any other man in the class: always jolly, and always ready to do anyone a favor when he can. Has never killed himself studying yet, but he always weathers the storm at the end of each term. Proudly points to the fact that he was "sampler" one summer at the Anaconda Smelter.



MAURICE MERTON ALBERTSON, T B II
AURORA, MO.

*He will to bed go sober
Falls with the leaf still in October.*

Grubstaker
Missouri University, '08
Basketball, '09, '10, '11
Athletic Association, '09, '10, '11

"Little Husky" hails from Missouri University, but is so quiet you would hardly realize it. Is a hard, earnest worker, and his class records show him to be a good student. As a basketball player he is a little wonder and will be greatly missed on next year's team.



ERNEST JAMES ALLEN,
FORREST, ILL.

Mine hours were nice and lucky.

Grubstaker
Y. M. C. A.
Athletic Association, '08, '09, '10, '11

"Hard Shell," so called because his skull had the quality to resist the impact of a sixteen pound shot. Prof. Dean says the accident improved his mathematics fifty per cent. Does much night prowling. Gets much amusement out of Prof. Harris's illustrated lectures.



JAMES KELLER BEACH, II K A
DALLAS, TEXAS

"'Twas only by favor of mine," quoth he, "Ye rode so long alive."

Athletic Association, '08, '09, '10, '11

"Jimmie" spends so much of his time with the fair sex that we don't see him often. Knows how to keep on the good side of the professors. Will finish in June and then—we leave that to you.



RAYMOND ALEXANDER BINGHAM, T B II
ROLLA, Mo.

Oh Ye Gods! Render me worthy of this most noble wife!

Assistant in Physics, '11
Athletic Association, '08, '09, '10, '11
Y. M. C. A.

"Bing" once lived in Massachusetts, but four years continuous residence in Missouri has changed him so that you would never suspect it. Is one of our three married men.



TRUE WALTER BLAKE, T B II
CHICAGO, ILL.

'Tis the mind that makes the body rich.

Grubstaker
Football, '08, '09, '10, '11
Football Captain, '11
Class President, '10
Miners Minstrel, '10, '11
Track Team, '08

"Red" is both student and athlete, and has a record in both that is hard to equal. Has done much to keep both the school and the class to the front. Can always be counted on when you need help. Has proved himself very valuable to the Rollamo Board this year.



HECTOR JOSÉ BOZA, K Ξ, T B II
LIMA, PERU

Handsome is that handsome does.

Escuela de Minas e Tugenia, Civil, Lima
Athletic Association, '08, '09, '11

Silent and well behaved and stands well in his classes. Has a habit of making high grades on his final examinations. Has a dreamy, far-away look and is doubtless thinking of some seniorita in Peru.



PAUL EPHRAIM COASKE,
ST. LOUIS, Mo.

*Give him a harp with a thousand strings,
And put him up where the angels sing.*

M. S. M. Orchestra, '08, '09, '11
Athletic Association, '11

"Pat" is our star violinist. Why he attends a mining school with his musical talent, is more than we can figure. Will probably start a school of music in Richland.



BENJAMIN HORACE CODY, K Σ
ST. JOSEPH, MO.

Wisely and slow; They stumble, that run fast.

Miners Minstrel, '09, '10, '11
Mandolin Club, '09, '10, '11
Athletic Association, '08, '09, '10
Missouri Mining Association

"Bug" comes from the village of St. Joseph. Is a noted mandolin player and tobacco consumer. Is a great favorite among the girls, and has had more cases than any of the fellows. Has now joined the St. James steadies. Is a favorite of Prof. Harris, and will probably be a plumber.



ROBERT NATHANIEL COPELAND, Σ N, T B Π
CHELSEA, MASS.

Just think; she'll be eighty-one when I am forty-nine.

Baseball, '10, '11
Athletic Association, '08, '09, '10, '11

"Bob" comes from "deah old Boston." Spends his time talking to "brother" and keeping McFadden from harm. Has almost learned to say "here" instead of "heah". Has both talent and ability, but his unconcerned disposition causes many to think him lazy.



MILAN HARRISON DETWEILER,
LEBANON, MO.

*Books can not always please, however good;
Minds are not ever craving for their food.*

Lucky Strike
Y. M. C. A.
Manager Football Team, '09
Basketball, '08, '09
Football, '11
Baseball, '08, '09, '11
Athletic Association, '07, '08, '09, '11

"Det" is of the class of 1910. Was one year in the Illinois coal fields and will now finish with a good class. Nevertheless, we are glad to have him with us for he is a good scout. Is a good athlete and will be missed next year.



CARLOS ELMORE,
LIMA, PERU

The art of a thing is, first its aim, and next, its manner of accomplishment.

Escuela de Minas e Tugeneria, Civil, Lima
Rollamo Board, '11
Miners Minstrel, '09, '10
Athletic Association, '09, '10

Elmore is an all-round artist, including sculptoring, drawing, and music. His Spanish love songs never fail to make a hit. Spends most of his time talking about the pretty girls and playing the guitar.



EDWARD WILLIAM ENGLEMAN, K A

ST. LOUIS, MO.

Remember this: That very little is needed to make a happy life.

Rollamo Board, '10
Baseball, '08, '09, '10, '11
Baseball Captain, '10
End, Miners Minstrel, '09, '10, '11
M. S. M. Orchestra, '09, '10, '11
Athletic Association, '08, '09, '10, '11

Familiarly known as "Hungry." Does not like to own up now that he ever was a "swamp angel." His fame as an actor and comedian reaches as far as Salem. Is a baseball star, and the loss of him and his big stick will be a blow to the baseball team.



FRANK JAMES FLYNN, K Z

ST. JOSEPH, MO.

*Society is one polished horde,
Formed of two mighty tribes:
The bores and the bored.*

End, Miners Minstrel, '09, '10, '11
Athletic Association, '08, '09, '10, '11
Rollamo Board, '11
Mandolin Club, '11

"Mickey" and his Irish wit were the life of the class when a Freshman. But now he is as sober and sedate as a judge, perhaps the result of feminine influences. His outbreaks are now confined to the Miners Minstrel, where he is a star attraction.



DAVID LAWTON FORRESTER, K Z

ROLLA, MO.

*They have looked each other in the eyes
And there they found no fault.*

End, Miners Minstrel, '09, '10
Rollamo Board, '10
Football, '10, '11
Athletic Association, '08, '09, '10, '11
President Missouri Mining Association
Student Council
Assistant in Descriptive Geometry, '09, '10

"Red" takes more interest in student activities than any other man in school, unless it interferes with his St. James fussing. Was one of the minstrel stars until he retired this year. Is a good scout, well liked, and his beacon light will be missed by all.



GERMIN GARCIA,

MEXICO CITY, MEXICO

There was language in his very gesture.

Athletic Association, '08, '09, '10, '11

Another one of our guests who traveled a long way to come to school here. Loves to talk of Mexico and the pretty girls. Thinks that Mexico could lick the United States if it wasn't for Texas. Is the only one that ever succeeded in causing McVey to waste enough energy to get mad.



EVA ENDURANCE HIRDLER,
ST. LOUIS, MO.

She needs no eulogy, she speaks for herself.

Washington University, '08, '09
Missouri Mining Association.

"Little Eva," according to the St. Louis newspapers, is the only female mining engineer in the world. Has been with us two years and says she is sorry that it has not been four. Puts great dependence in her unlimited amount of nerve, and expects to operate a gold mine in California.



IVORY SMALL JAMES, Σ X
SAN ANTONIO, TEXAS

Society is no comfort to one not sociable.

Mass. Institute of Technology
Athletic Association, '10, '11
Student Council

After trying schools both East and West, he decided that M. S. M. was the only one. We suspect, however, that his stay here is caused by other attractions than the quality of the school.



JACOB ADOLPH KURZ,
ST. LOUIS, MO.

*I pray thee, cease thy counsel, which falls into mine ears,
As profitless as water in a sieve.*

Grubstaker
Athletic Association, '08, '09, '10, '11
Baseball, '10, '11
Basketball, '09, '10, '11
Basketball Captain, '11
Y. M. C. A.

How he lives, we don't know, but this is no patent medicine advertisement. Is the giraffe of the basketball team. Says the faculty likes to flunk athletes.



SAM PAUL LINDAU, Φ Γ Δ
LIBERTY, MO.

I would rather exceed others in knowledge than in power.

William Jewell College
R. Way
M. S. M. Orchestra, '10, '11
Athletic Association, '11

Paul comes from William Jewell College but says not to blame him for it, for his parents drove him to it. Is very popular with the younger set whom he captivates with his solos on the bass viol.



OTTO ALLEN LUNAK,
CHICAGO, ILL.

*A man's character
Depends on the conditions.*

Grubstaker
Athletic Association, '08, '09, '10, '11
Manager Football Team, '11
Treasurer Athletic Association, '11

Otto is the Grubstaker's leading politician, and vainly tries to fill the place of "Red" Barrett. Was quite a fusser until the arrival of the mighty Kayser. Now spends most of his time with the affairs of the Athletic Association.



EDWIN COOK McFADDEN, Σ N
CHICAGO, ILL.

The man who smokes thinks like a sage and acts like a Samaritan.

Michigan College of Mines, '08, '09
Athletic Association, '10, '11
Basketball, '11

Has two main faults: falling down and telling how things were done at Houghton. Is getting over the latter, but we fear the first will never be overcome.



JAMES EDWARD MCGOUGHAN, K Σ
ROLLA, MO.

Wherefore he called to his wife, and fled to fashion his work anew.

University of Wisconsin, '09
Assistant in Chemistry, '11
Athletic Association, '10, '11

After spending fourteen years in practical work, "Mac" decided that he needed a degree from M. S. M. He leaves us this year not only with a degree but a wife and family as well. Has been a hard worker and carries away with him the respect of everyone.



SUMNER COOLEY MACOMBER, K A
DES MOINES, IOWA

*He was a man, take him for all in all,
I shall never look upon the like of him again.*

Football, '08, '09, '10, '11	Football Captain, '10
Track, '08, '09, '10, '11	Track Captain, '11
Class President, '09	Class Secretary, '11
Student Council, '11	Missouri Mining Ass'n
Miners Minstrel, '09	Athletic Ass'n, '08, '09, '10, '11

"Mac" is undoubtedly the best athlete that ever came to M. S. M., and his departure will leave a hole in the athletic department that will be hard to fill. Is a jolly, happy-go-lucky fellow, fearing no one, not even the professors. His only intemperance is drinking buttermilks, for which he holds the school record.



CHRISTIAN R. MILLER, JR., Σ N, T B Π
SEDALIA, MO.

His conduct still right with his argument wrong.

Athletic Association, '07, '08, '09, '11

You can hear him long before you see him. Worked one year in Butte and claims to be an authority on anything in that district, from "mucking" to geology. Likes to argue with the profs. when anything concerning Butte is mentioned.



ROBERT BRUCE MITCHELL, T B Π
WALKER, MO.

Thinking that nothing was done, if anything remained to do.

Student Council

M. S. M. Orchestra, '08, '09, '10, '11

Business Manager, Rollamo, '11

Assistant in Shop and Forge, '10

Athletic Association, '08, '09, '10, '11

Missouri Mining Association

Track, '09

Class President, '08

"Mitch" originally hails from Illinois and has a big variety of stories and songs that everyone has heard more than once. Is a good student and a musician of note. When anything is to be done for the school, you can count on "Mitch."



HARRY WILLIAM LEE PORTH, K Σ , T B Π
KANSAS CITY, MO.

Men are but children of a larger growth.

Rollamo Board, '08

Basketball, '07, '08, '09, '11

Athletic Association, '07, '08, '09, '11

Hook-worm Society

"Babe" is the pride of Kansas City. Is a good student and athlete. Is one of the originators of the Hook-worm Society. Has been out in practice one year and is so fond of practical work that he has been known to work for nothing. Is from the class of 1910.



ARTHUR GUSTAV PUDEWA, Π K A, T B Π
CHICAGO, ILL.

*Thou hast no sorrow in thy song,
No winter in thy year.*

Athletic Association, '08, '09, '10, '11

"Pudy" proudly proclaims the fact that he is from the "Windy City." Was a good student until this year, but now spends one-half of his time at Powell's and the other half telling the fellows what a good time he is having.



SHIV RAJ,

LAHORE, INDIA

I have often regretted my speech, but never my silence.

Athletic Association, '08, '09, '10, '11

Y. M. C. A.

Shiv comes all the way from India to attend our school, and says that it is well worth the trouble. His chief enjoyment is bothering Macomber, who loves him like a brother.



OSCAR ALAN RANDOLPH, Π K A, T B Π

KANSAS CITY, MO.

*In the spring a young man's fancy
Lightly turns to thoughts of love.*

Rollamo Board, '11

Assistant in Chemistry, '10, '11

Athletic Association, '08, '09, '10, '11

Missouri Mining Association

"Randy" loves to dream that he is the gun the professors think he is. Outside of this he does nothing else but fuss, being one of the silent kind that get theirs by the use of gum drops. Has found time this year between his frequent visits on Salem Avenue to get together ten jokes for the Rollamo. Is thinking of taking up millinery when he graduates.



DUNCAN SLATER SMITH, K A

ROCKFORD, ILL.

A woman spake and he heeded her not.

Miners Minstrel, '09

Athletic Association, '07, '08, '09, '11

"Dunc" is naturally a bright fellow and spends his time priming fellows for finals which they pass and he cons. He should have graduated years ago, but showed his wisdom by taking a few years of practical experience and graduating with the class of 1911.



ROY ELLIOT SPRAGUE,

FARMINGTON, MICH.

*Fire is the test of gold,
Adversity of strong men.*

Michigan State Normal School

Miners Minstrel, '10, '11

Athletic Association, '11

"Jack" is a quiet fellow whom we have never been able to understand, but has many good points that we know. Is a hard worker, and a good student. We all wish him good luck for we know that he deserves it.



HARVEY LOUIS TEDROW, Σ X

St. JOSEPH, Mo.

*A little nonsense now and then,
Is relished by the best of men.*

Missouri University, '08

Rollamo Board, '11

Athletic Association, '09, '10, '11

End, Miners Minstrel, '09, '10, '11

"Harvey" is the smallest man in the class, but makes up for it in good fellowship. Is a good mixer and, of late, has proven himself to be a good student: even the Director pats him on the shoulder and says, "Harvey, I am proud of you." Is one of the minstrel stars that will be hard to replace. Has only been with us three years, but we wish that it had been more. Has some reputation as a railroader.



FRANK EDGAR TOWNSEND, T B Π

BELGRADE, Mo.

Better wear out than rust out.

R. Way

President Senior Class

President Y. M. C. A.

Football, '11

Athletic Association, '08, '09, '10, '11

"Old Faithful," our class president, gets his by work, pure and simple, and has none of those qualities that make the professors think that he knows more than he really does. Is a noted orator and generally takes up more time introducing the Y. M. C. A. speaker than the time of the lecture.



JOHN PERRY WALKER,

ROLLA, Mo.

*As we advance in life,
We learn the limits of our abilities.*

Assistant in Chemistry, '10, '11

Athletic Association, '10, '11

"Professor," after ten years of practical experience, came back to M. S. M. to get his degree with the class of 1911. He spends his spare time guiding the Sophs along the stony path called Qualitative. Is popular alike with students and faculty.





Senior Class History



SUPPOSE that after a few years, when, in the pursuit of their vocation, two members of the class of 1911 should happen to meet. Their conversation would soon drift back to their college days; and no doubt these would be some of the things that they would say:

"I can remember well when we were Freshmen; those were great times. We were kept pretty busy hazing the Sophs and being hazed ourselves. I can never forget some of those class meetings we had just before Green Cap day. Mitchell's voice could be faintly heard, 'Fellows, be quiet. We must proceed with business.'

"But, say, wasn't that a hard scrap we had? It took the whole school to tie us and make us wear the green caps. We had a lot of fun the night before, pulling Sophs out of bed and tying them up, but we didn't tie them with ropes to trees on the athletic field as the papers stated the next morning. We were defeated and had to wear the caps.

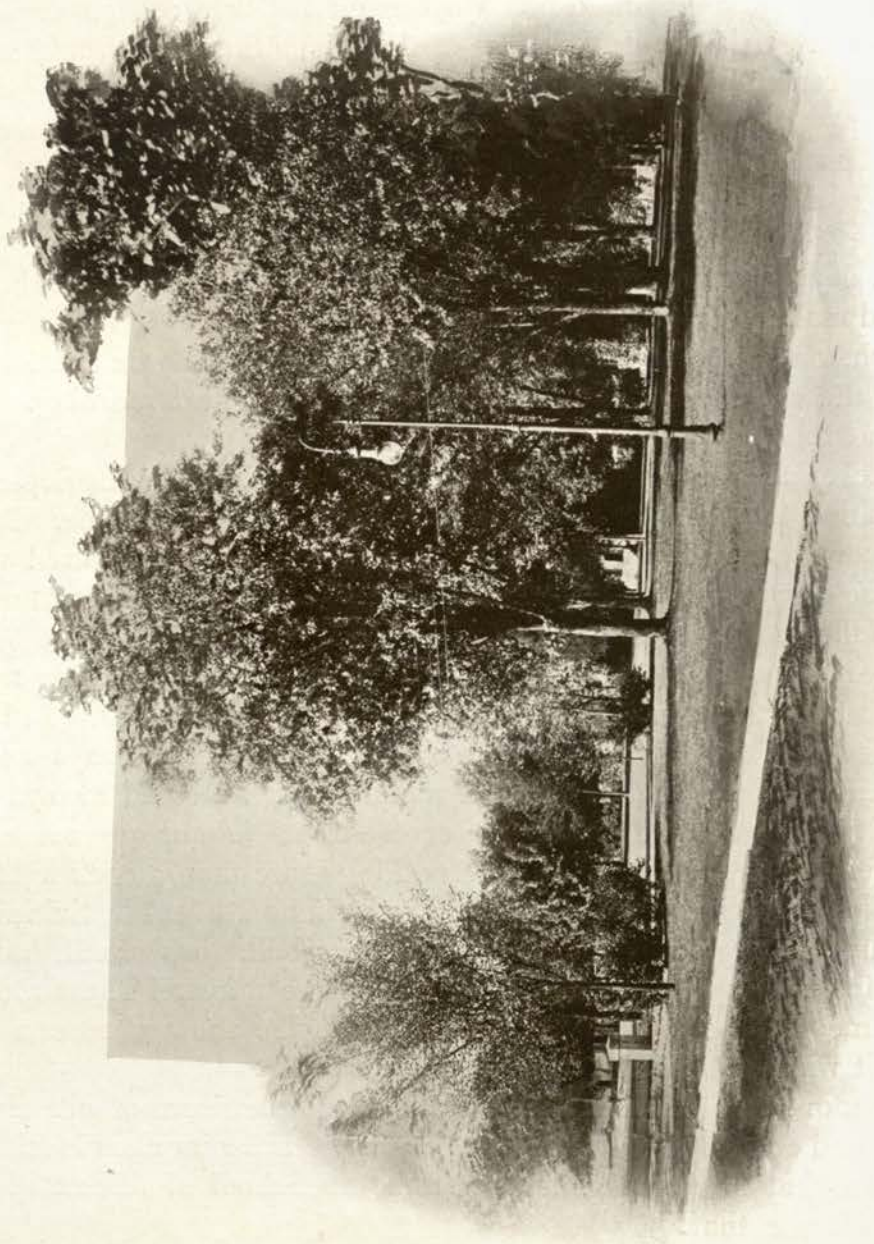
"However, the following year we had just as much fun as the Sophs had had with us, making the Freshmen do the same things as we had done. Macomber carried on a vigorous campaign against the Freshmen. So scared were they of us that the day before Green Cap Day they took to the woods and every class since has followed their example.

"Do you remember how we used to cut English? Ben Cody would say, 'No English today, fellows,' and all would stroll off down town. But the next week we made up the hour after four o'clock. We were always kept pretty busy. When the daily routine became monotonous we could always count on 'Hungry' Engleman, 'Red' Forrester or Tedrow, to stir up something exciting and really worth while, if it were nothing more than a cock fight.

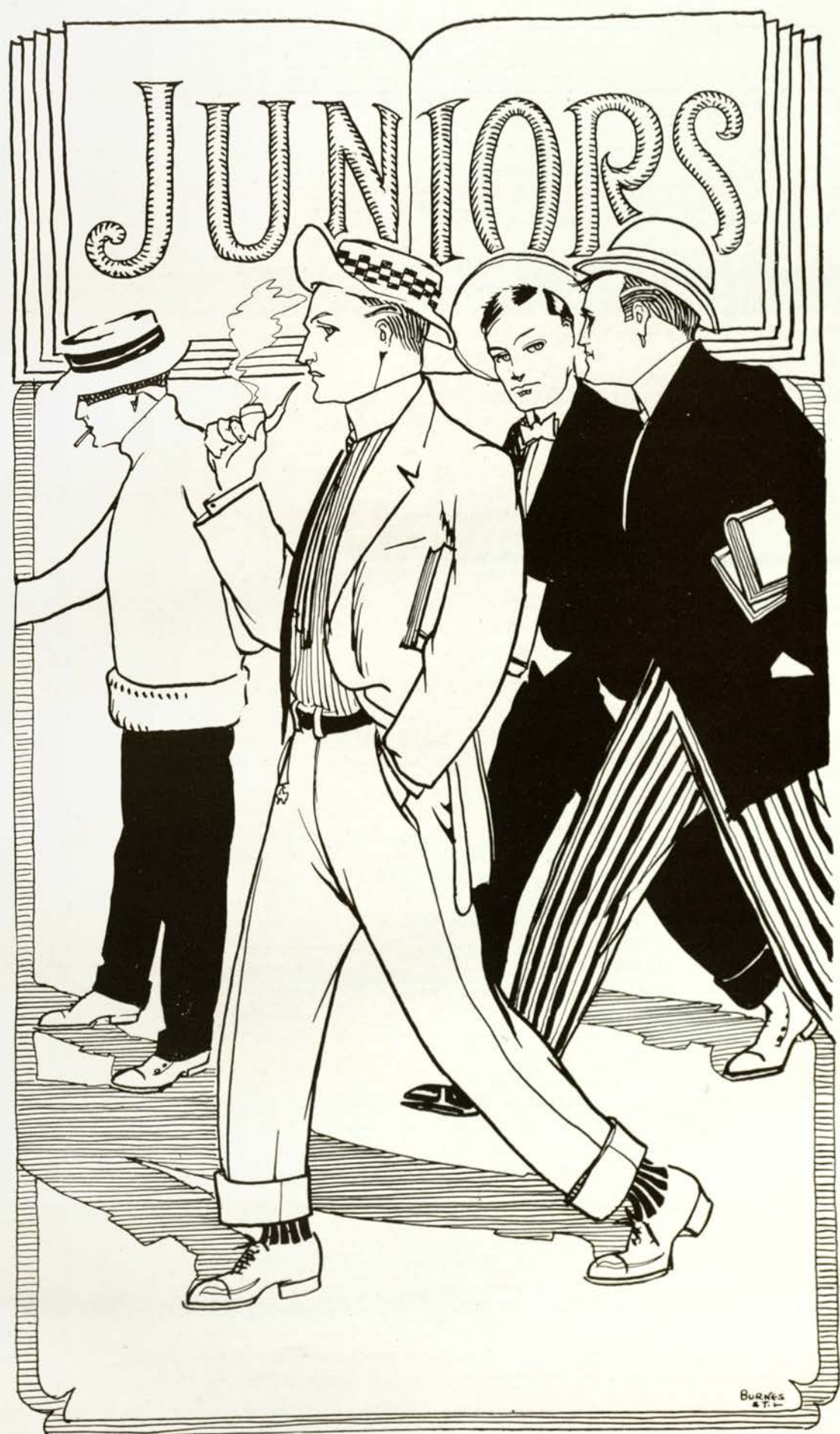
"As a class we were successful in the various student activities. Many men in our class were in the football, baseball, basketball, and track teams, and in all things 1911 took the lead. In the minstrel show most of the end-men came from our ranks and they made the show a success the first three years it was produced."

Many more things could be said about the members of our class, both individually and collectively, but to sum it all up, this Senior class is undoubtedly the best class that has ever gone out from the School of Mines. Most any Senior will tell you that.

We are about to leave the institution to which we owe our education, and if any member of our class has failed to recognize that he has been associated for four years with the best fellows that he will ever be associated with, he has failed to obtain one of the best parts of his education. We will be widely scattered both east and west. Few mining camps will there be where the name of our college will not be carried by us. We will take with us that spirit, that loyalty, that reverence for our Alma Mater that has held us together as a class for the last four years.



ACROSS THE CAMPUS



BURNES
& T. -



Junior Class

ABERNATHY, GEORGE ELMER	Willow Springs, Mo.
ADAMS, CHARLES W., JR.	Mitchell, S. D.
ADAMS, HENRY FARNUM	Prescott, Ariz.
ANDRUS, DEXTER ELI	Rockford, Ill.
BRIBACH, OSCAR NICHOLAS	St. Louis, Mo.
BROUGHTON, EUGENE HARDING	Jefferson City, Mo.
CHASE, JAMES HOWARD	Logansport, Ind.
COCKBURN, HAROLD WARDELL	St. Joseph, Mo.
CONOVER, CAIRY C.	Carrollton, Mo.
CONWAY, CLIFFORD LEROY	Rolla, Mo.
COOVER, LOUIE LINCOLN	Springfield, Mo.
COPELIN, LEONARD STEPHEN	Great Falls, Mont.
CRONK, ARTHUR HARRISON	Omaha, Neb.
ELBELT, WILLIAM HENRY	St. Joseph, Mo.
FOGARTY, EDMOND ALLEN	Chinook, Mont.
GERINGER, OTTO GEORGE	Chicago, Ill.
GRAY, WALTER BERRY	Louisiana, Mo.
GROSBURG, ALEXANDER	St. Louis, Mo.
HACKWOOD, ARTHUR WELLESLEY	Baxter Springs, Kan.
HARRIS, DEENE DWIGHT	Rolla, Mo.
HAYES, DALE IRWIN	Rock Island, Ill.
HELLSTRAND, GUSTAF AXEL	Shanghai, China
HOLLISTER, SCOVILLE EDWARD	Marshall, Mo.
IRWIN, JOSEPH STEWART	Louisiana, Mo.
KATZ, EDGAR DOUGLAS	Kissimmee, Fla.
KATZ, HOWARD M.	Kissimmee, Fla.
KLINE, DUANE MONTGOMERY	Rolla, Mo.
KNAPENBERGER, WM. RALPH	Brunswick, Mo.
LYNTON, EDWARD DALE	Rolla, Mo.
LYONS, CLYDE FRANCES	Springfield, Mo.
MAVEETY, ROSWELL HARE	Cincinnati, Ohio
MILLER, WINLOCK W., JR.	Kansas City, Mo.
MOLYNEUX, GUY MELVIN	Rolla, Mo.
MORRIS, EDWIN ROBINSON	Jefferson City, Mo.
NAYLOR, ARCH WAUGH	Rolla, Mo.
NEWELL, JOHN CRITTENDEN	Terre Haute, Ind.
NEWTON, LLOYD CHARLES	Gurdon, Ark.
PAULETTE, ROBERT JUSTICE	St. Joseph, Mo.
PORRI, WILLIAM	St. Louis, Mo.
PRATT, GEORGE H.	Detroit, Mich.
RADCLIFFE, DONALD HEWSON	Rolla, Mo.
RAIBLE, NORMAN WILLIAM	Hannibal, Mo.
SHEFFER, MARK	Rolla, Mo.
SHERRY, HOMER KENT	Rolla, Mo.
STROUP, THOMAS ANDREW	Quincy, Ill.
TAGGART, JAMES ALBERT	Rolla, Mo.
THOMAS, GEORGE SYLVESTER	Chicago, Ill.
WILLMOTT, MILLER EDWARD	Liberty, Mo.
WRIGHT, CLARK WATSON	St. Louis, Mo.
YOUNG, CARL DEUEL	Fargo, N. D.



Junior Class History



A. W. NAYLOR, President



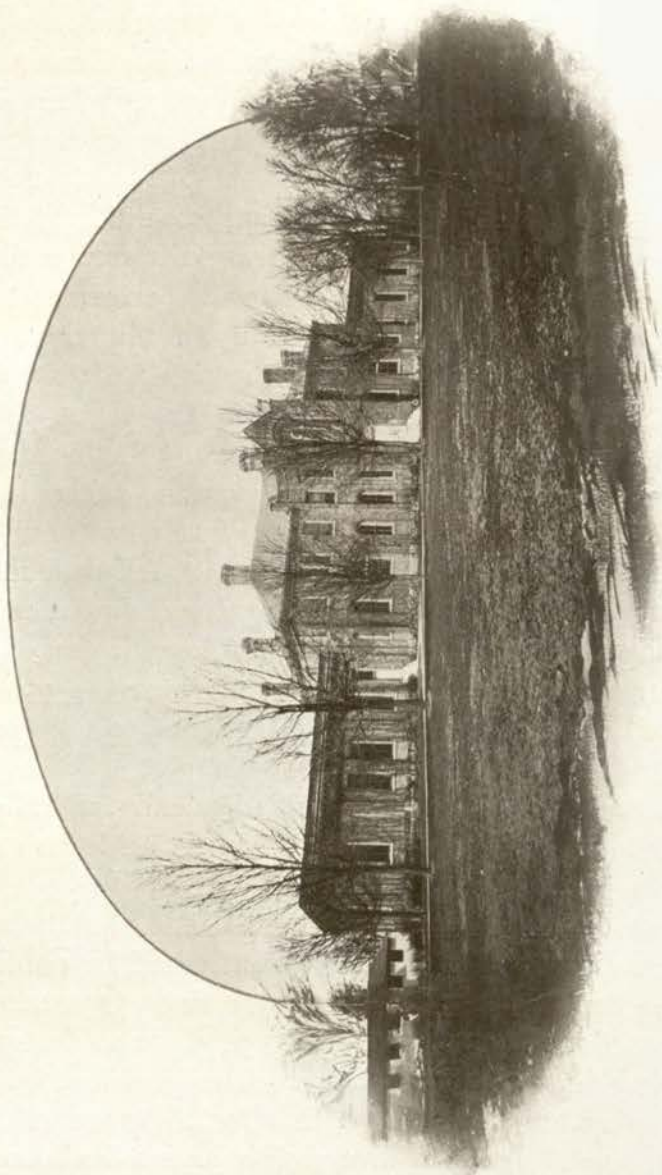
SIXTY! SIXTY! Rolla was aroused. What did it mean? Was it a race riot? It was the class of 1912's C. Q. D. That September night in 1908 marked the beginning of the class of 1912. We were only Freshmen then. Freshmen who hazed Sophomores; who required the combined strength and skill of the upper-classmen to discipline; who gave a smoker; and who furnished men for the varsity football, baseball, basketball, and track teams.

The next fall, dressed in new corduroys, we patrolled the city and conscientiously performed the responsible task of keeping those unruly, absolutely uncivilized animals, carrying highschool diplomas, from getting into trouble. No time was lost in teaching them to bark at the moon, and in testing their voices by having them sing the praises of our class. But they were a bad lot and no leniency could be shown these rare specimens of *greenus freshmanus*, and on Green Cap Day they were ordered tied and tossed in the blanket. All were made to observe the rules and regulations laid down by their superiors, and exceptionally loud and offensive individuals were made more presentable with green paint. That night the school was our guest and with hearty good cheer the *greeni freshmani* were officially recognized as the class of 1913 and invited to take part in every school activity.

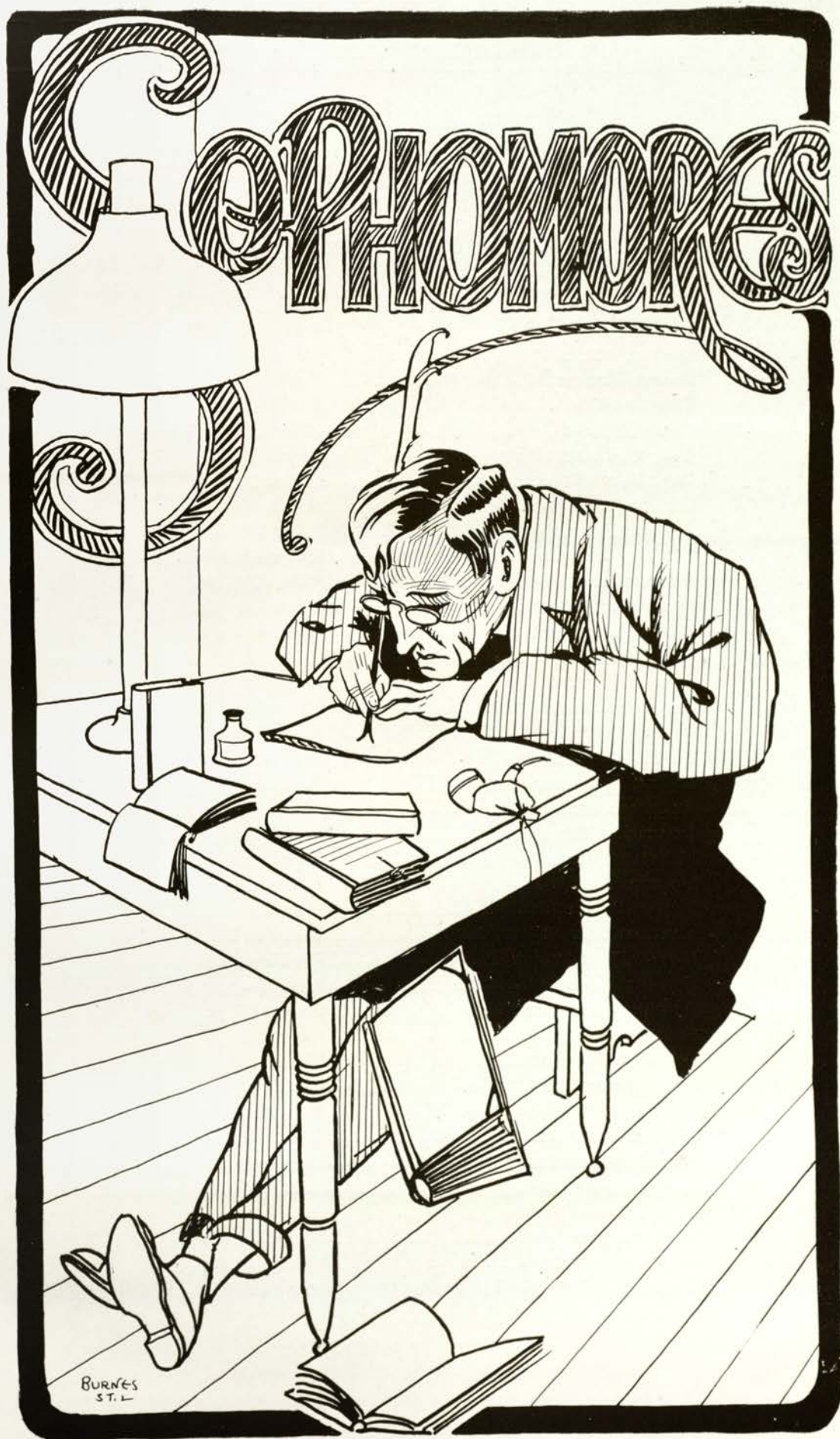
This strenuous work did not injure us physically, morally or intellectually; and we continued to make a creditable showing in athletics and all other school activities.

Thus far our diet had been dry mental food, but, when we returned in August, Terry Mac discovered that great results could be obtained from a topography class whose task was to map contour lines traversing a melon patch. Probably it was not alone the melon diet that made us so dexterous, but the training we had received during the summer, such as pushing ore cars and handling the "muck stick" may have helped. It is a fact, however, that the character of our work had changed. Instead of training *greeni freshmani*, we applied our efforts to more cultivated and developed activities. Consequently, on March the seventeenth, we celebrated St. Patrick's Day. The celebration was a characteristic Irish festive occasion, with due consideration for the engineer.

I almost forgot to tell you that we are Juniors. In this capacity we elected "Dady" Naylor, one of our most cultivated and developed men, to be our class president. Under his guidance we have developed into the best Junior Class in the history of the college. We may have had some obstacles that worried us, but these enabled us to appreciate our environment the more. We recommend to every class in school the class of 1912 as a model and example in every respect.



CHEMICAL HALL





Sophomore Class

BOUCHER, LEONIDAS JAMES	Marshalltown, Iowa
BRAMSON, CHARLES	Rolla, Mo.
BREWER, WILLIAM FRANCIS	Carlinville, Ill.
BROOKS, HERBERT	Sheridan, Wyo.
CASTILLON, TIRSO	Torreon, Mexico
CEPEDA, MIGUEL LEON	Mapimi, Mexico
CLAYTON, CHARLES YANCEY	Hannibal, Mo.
CODY, FRANK WESLEY	St. Joseph, Mo.
CROTEAU, LEON JOHN	St. Joseph, Mo.
CUMMINGS, LISTER MERRIKEN	St. Louis, Mo.
CUSHWA, CLAUDE	Independence, Mo.
DICKSON, FRANK PAUL, JR.	Kansas City, Mo.
DONALDSON, JAMES FLOYD	Kansas City, Mo.
EHLERS, WILLIAM, JR.	St. Louis, Mo.
GARRETSON, LEONA BELLE	Rolla, Mo.
GELINEAU, EMILIEN EMERIE	Rolla, Mo.
GLEASON, AUGUSTUS WILLIAM	Chicago, Ill.
HALLEY, EARL	Auxvasse, Mo.
HOPKINS, JAMES	Ramey, Pa.
KADELL, CARL PETER	St. Louis, Mo.
KNICKERBOCKER, ROY GOULD	Clymers, Ind.
LEASURE, LA VERE	Larned, Kan.
McFARLAND, RUSSEL BANTA	Crawfordsville, Ind.
McLURE, TIMOTHY BLOOMFIELD EDGAR	St. Louis, Mo.
McNAIR, STUART STRATHY	Rolla, Mo.
MARSHALL, HOLMAN THOMPSON	Sioux City, Iowa
MURPHY, JOHN ANDREW	Fort Pierre, S. D.
NEEDLES, ENOCH RAY	Rolla, Mo.
NOWLAN, HARRY HACKETT	Cheyenne, Wyo.
SCHMICH, MATT, JR.	Freeport, Ill.
SEWARD, J. FREDERICK	Hillsboro, Ill.
SICKLY, ROBERT GLEN	Iola, Kan.
SMITH, CLYDE OTHELLO	Rolla, Mo.
STRICLER, DAHL LEWIS	Marion, Ind.
SUDHOFF, RALPH WILLIAM	Richmond, Ind.
TIERNAN, JAMES PETE	Kansas City, Mo.
USTICK, EDWARD THOMAS, JR.	St. Louis, Mo.
WEBSTER, JOHN NIXON	Creston, Iowa
WILSON, ERNEST C.	Rolla, Mo.



Sophomore Class History



G. KNICKERBOCKER, President

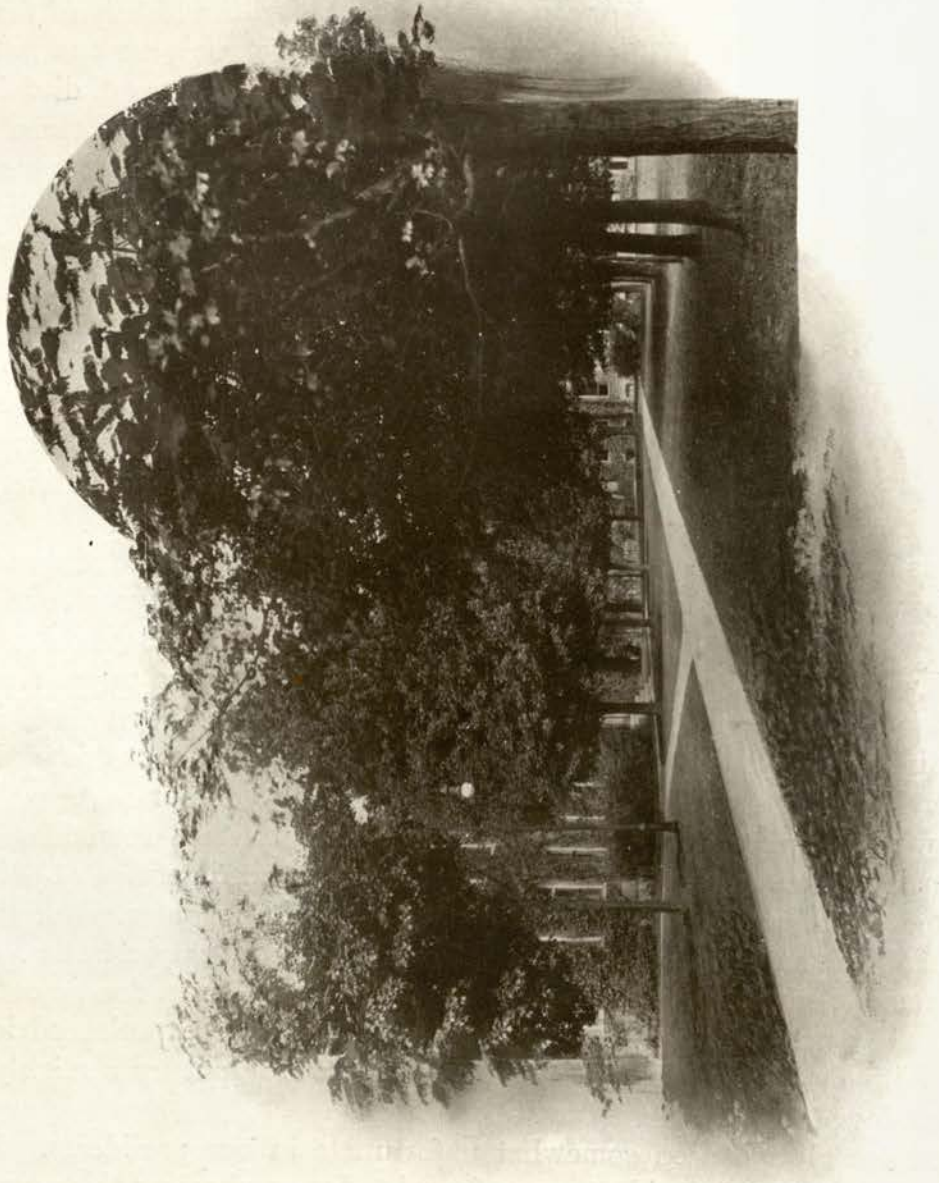
IT HAS BEEN rightly said that the things which are most enjoyed are those which come in the nature of pleasant surprises. This saying can well be adapted to the history of the class of 1913. Upon our coming here one year ago last September we were met with mingled feelings of disdain and regret upon the part of the members of the three upper classes of the school. As to why the Sophomores of that year looked upon us as they did, a great deal might be said. But it is sufficient to say that they were so well satisfied with themselves because of their large and imposing numbers, that they could not open their eyes wide enough to see any good in a younger class of such small numbers as was ours. As to why the Juniors and Seniors looked upon us as they did—well, the chief duty of the upper classmen is to appear haughty and indifferent to the awe-inspired Freshman.

Thus it was that the Sophomores of that year endeavored to make a name for themselves in the history of the school by taking advantage of our inferiority(?). When Green Cap Day was close at hand, they announced publicly that they wished to tame the Freshmen without the aid of the upper classmen. They did it all right, and they did a good job—but they only had about half as many again as we did. At that we put up a fight that lasted about thirty minutes, for we certainly had a good leader and he inspired us to do our best.

Now the Sophomores felt that they had accomplished something which would never be repeated, so that when we announced our intention of doing the same thing to the Freshmen this year, we were met with laughter. But we were undaunted and succeeded in finishing the job in about twenty minutes. However, it is not to our purpose to belittle the present Freshmen, for we outnumbered them by possibly five men, and also we were more experienced in such affairs. With big "Olie" Lodwick as their leader, they put up a mighty good fight, even down to "Little Tommy."

We have always been somewhat unfortunate in our presidents. In our Freshman year our two presidents were forced to leave school. This year C. O. Smith, our first president, had to leave us on account of his hearing. We were all sorry to see him go, for he was one of the best liked men of our class. Let us hope that our present president, Knickerbocker, will prove as durable in his new office as he has in everything else he has undertaken.

The largest element in the making of a greater and better Missouri School of Mines is the genuine interest and concern which each student must have for his fellows. This is essential and must continue to be fostered. Our hope and ambition is to become a still more potent factor in the building up and betterment of M. S. M. May our desire be gratified.



CAMPUS VIEW





Freshman Class

BARCLAY, HUGH	Little Rock, Ark.
BOGEN, WILLIAM AUSTIN	St. Joseph, Mo.
BOWMAN, LEE	Sikeston, Mo.
CARLSON, ANTHONY WILLIAM	St. Louis, Mo.
COLLINS, LAWRENCE	Quincy, Ill.
COWMAN, GERARD	Bellefontaine, Ohio
CRUTCHER, THOMAS EUSTUS	Napton, Mo.
DAMOTTE, EDWARD VICTOR	Rolla, Mo.
DAVIS, FRED E.	Bevier, Mo.
EDWARDS, BLAINE	Lynn, Ind.
FAHRENDORF, PETER MAURICE	Washington, Mo.
FARRELL, OLIVER A.	St. Louis, Mo.
GENSER, JOSEPH DEDECK	Gilliam, Mo.
GOSS, BLAKE	Rockville, Ind.
GREEN, CARL D.	Rolla, Mo.
HALSEY, HOWARD GOVE	Kansas City, Mo.
HAMM, CARL	Clifton, Ariz.
HAMMOND, ARTHUR KEPLER	Bonne Terre, Mo.
HATCH, SIDNEY RAYMOND	George, Iowa
HUBBARD, HAROLD JELLEFFE	Vincennes, Ind.
JONES, FORREST MARTIN	Kansas City, Mo.
KAYSES, ALEXANDER	St. Louis, Mo.
KELLY, MERVIN JOE	Gallatin, Mo.
KLINE, HARRY DANIEL	Rolla, Mo.
KOCH, HUGO EDWARD	Creve Coeur, Mo.
LODWICK, LLEWELYN	Ottumwa, Iowa
MOSEC, FREDERICK GALLAWAY	Kansas City, Mo.
PRINGLE, LEWIS BRADEN	Quincy, Ill.
RICHARDS, WALTER HARRISON	La Moille, Iowa
ROSS, CHARLES WOODSON	Springfield, Mo.
RULE, FRANK JERALD	Springfield, Mo.
SCHMIDT, JOHN NORMAN	Chicago, Ill.
STANLEY, EVERETT ROLLINS	Sedalia, Mo.
STROUP, JACOB CARL	Quincy, Ill.
THOMAS, RAE	St. Louis, Mo.
WAGER, WALTER HENRY	Newtonia, Mo.

Special Students

BOYLE, JOHN CLARENCE	Trinidad, Colo.
HASSETT, JAMES LESTER	Rolla, Mo.
HIELSCHER, J. A., M. D.	Rolla, Mo.
HUDSON, HARVARD FARMER	Wichita, Kan.
MAXWELL, ARTHUR BYRON	Chico, Tex.
UPDIKE, MAITLAND	Farmington, Mo.



Freshman Class History



L. L. Lodwick, President



HE prospect of an easy life free from tormentors and such, as some credulous new arrivals from high schools are apt to think is coming to them, is quickly and severely demonstrated to be otherwise, ere said new comer has passed many hours in Rolla. The Sophs are on the watch for such unsophisticated material that arrives regardless of the time.

The feeling of being jerked off the train even before it has stopped is perhaps strange, but the strangeness is still greater when some twenty or thirty young men with barrel staves and force behind said staves,—which is freely demonstrated without cost—take you and perhaps some other unlucky companions to some isolated spot and there have you perform such “stunts” as you never before dreamed of performing.

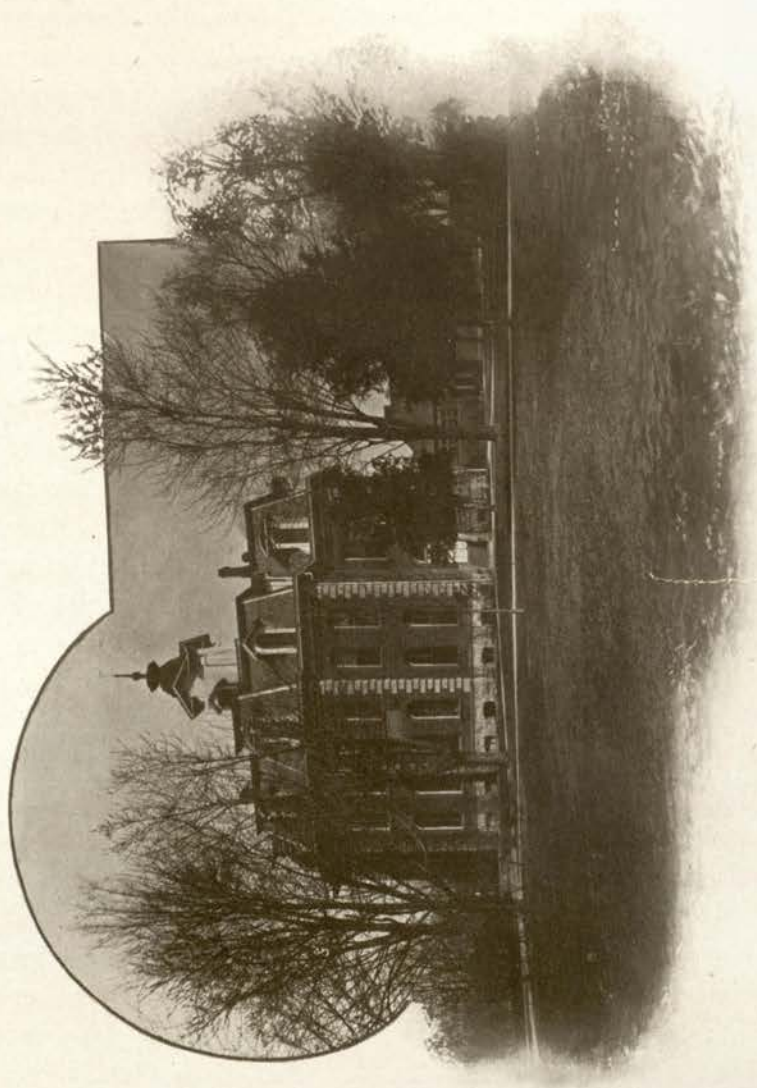
Would anyone believe it possible, for one, with the aid of the nasal proboscis alone, to roll a match the length of a street, especially if that nasal proboscis is a pug one? Of course not! Perhaps you have heard of swimming on land. No? Well, with barrel staves to the right of you, barrel staves to the left of you, and barrel staves in front of you this is a very easy feat. Your voice may be tried and you soon become very proficient in the musical art. Our class developed a Caruso or a Melba.

But let these few details suffice, to enumerate all would require a volume. A meeting was called and grievances were discussed but not mended. Our officers were elected. Lodwick, with his two hundred pounds and six-foot height, seemed to fit the needs of the time, and so was elected president. With him as our leader we felt capable of giving battle to any number of Sophs.

On Green Cap Day let us draw a curtain. It is enough to say that we were tied, painted, paddled, paraded about town, and in many other ways made to feel the strength and superiority of the upper classmen. However, we stood the test like men and came out of the conflict, though beaten, nevertheless victorious.

In return and in acknowledgment of the Sophomore smoker, we also entertained the whole school. We feel justly proud of this affair, not alone because it was such a success, but also because it showed that we were indeed an accepted part of our college.

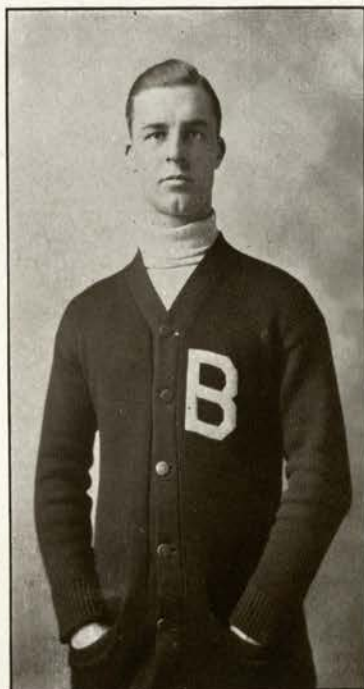
Besides the smoker, the class of 1914 deserves credit in athletics. We have furnished men for the Varsity football and basketball teams and, no doubt, will do as well in track and baseball. Our football team tied the Sophomore team, a feat that but few previous Freshmen classes can boast of. We have at least not been a discredit to our college, and we are all eager to work for our Alma Mater and help to make its future successes even greater than its past successes.



ROLLA BUILDING

BOOK III.
ATHLETICS

M. S. M. Athletic Association



MR. F. E. DENNIE, Coach

Officers

F. E. DENNIE, *Physical Director*

A. L. McRAE, *President*

O. A. LUNAK, *Treasurer*

H. K. SHERRY, *Vice-President*

E. R. ABBOTT, *Secretary*

Board of Control

F. E. DENNIE

A. L. McRAE

O. A. LUNAK



THE ATHLETIC ASSOCIATION has enjoyed a very prosperous year under its new management. The Association is entirely out of debt, due to the efforts of its President, Dr. McRae, and the Treasurer, O. A. Lunak. These two men have worked hard and consistently for the betterment of the Athletic Association financially, and too much praise cannot be given them.

The Athletic Director and Coach, Mr. F. E. Dennie, is to be congratulated upon the universal success of the various teams which he has produced. Every man in school is behind the coach in all that he does, because of the way he has handled athletics since coming here. Our athletic standing has advanced in the last two years until we are now second to no school, athletically, in the State, however much we may be behind them in the number of students. This is chiefly due to the winning teams that the coach has produced. We hope that the coach will be with us year after year, keeping athletics up to their present high standard.

Athletics in M. S. M. are certainly on the boom. We have one of the best athletic fields in the Southwest, the best coach in the State, and a student body that are full of enthusiasm for anything and everything athletically. We may well expect that our teams will continue to advance in standing so that in the near future M. S. M. will be one of the strongest colleges athletically in the Middle West.



Central-5 Miners-19



Drury-5 Miners-37







Football, 1910



VEN BEFORE the boys had gotten fairly started in their school work, Coach Dennie had the football men out on the gridiron falling on the pigskin and tackling the dummy. The prospects for a winning eleven looked exceedingly bright with three "M" men of the year before back, showing their old time form and so ably assisted by men who had come from other schools to become one of us and fight for old M. S. M.

On the first day of October we were pitted against Central College of Fayette, Missouri. We had had three weeks of good practice, so these boys who had slipped one over on us the year before were easily defeated with a score of 19 to 5. In this game the coach used many substitutes and it was more of a game to pick the men for the supreme struggle of the following Saturday than to work the scoring machine.

The next week was spent in hard scrimmage practice, and when we arrived in Columbia Friday night everybody was in the best of shape and eager for the great battle that was to take place on the following day. The day arrived, there was a light signal practice in the morning and in the heat of the afternoon sun Dennie sent his eleven warriors out on the field to uphold the honor of their Alma Mater.

The many Rolla rooters in the grand stand seemed to give the team confidence in itself. The Miners outplayed the University boys at every stage of the game. In the first quarter we crossed the Missouri goal line once, but the ball had to be brought back because the man catching the forward pass, in his anxiety to make a touchdown, had crossed the line before catching the ball. Andrus, our big tackle, was put out of the game by the umpire on grounds that seemed unfair to all the Rolla followers at this point.

In the second half we crossed their goal line again but the ball was brought back because one of our men was off-side and another was holding. Curses on the luck! Another chance to win our laurels in the Hall of Fame dashed to the ground! When the referee's whistle blew time for the last quarter the score stood 0 to 0. Even the Columbia men had to admit that the Miners' eleven outplayed the University and that they were very lucky not to have the score 12 to 0 instead of 0 to 0.

Another week of hard practice and we went to the Mound City to play the St. Louis University eleven. The train that was due to get in St. Louis at eight o'clock was over five hours late, so the Miners' football team did not get to bed till the wee small hours of the morning, and on the morning of the same day that we were destined to play one of our hardest games.

It was a hot afternoon and the heat, coupled with the loss of sleep from the night before, acted like weights on the feet of our players and after a hardly fought contest, the St. Louis team defeated us by the same score we had defeated them the year before, namely, three to nothing. The St. Louis papers said that we outplayed the home team, but that didn't help our shattered feelings in the least.

The next week saw our team in Manhattan, Kansas, ready to defend our colors on foreign soil. Here we met a team above our speed, the only team that ever beat Arkansas University on their own grounds. We played hard but we were defeated and outclassed to the tune of 23 to 3. The Kansas men said that they had a great deal harder game than the score indicated.

The game of the following week was like child's play compared with the strong elevens we had been playing for three consecutive weeks. Springfield Normals came to Rolla, but we let them off easy, only beating them 24 to 0. They were well pleased with the strong (?) showing they made against us.

When Kirksville saw what a wonderful record our team was making and realized that if they came to Rolla they would undoubtedly be defeated by a score even greater than they had suffered the year before, they called the game off and willingly sent their forfeit, thinking that they were pulling out of a hole with comparative ease.

The next week the Miners invaded Arkansas and everybody who saw the game agreed that we received a rather unfair deal at the hands of the referee. We were expecting that kind of treatment and so took it with the best grace we could, knowing Arkansas' record for such dirty work. As it was, the defeat of 6 to 2 might have been a great deal worse.

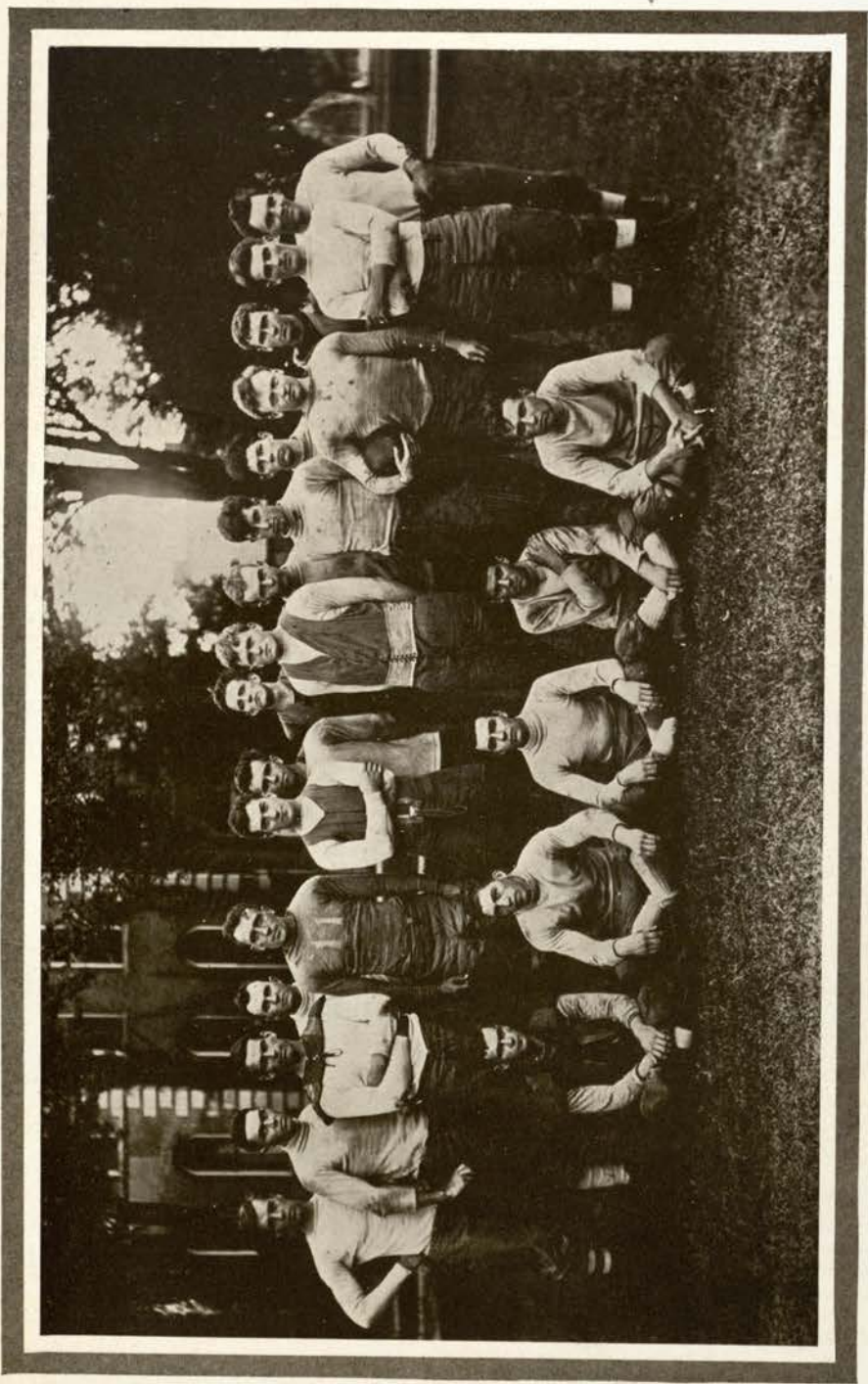
Thanksgiving Day we were to play Drury on our home grounds, so the school and town's people assembled in the grandstand to see a good game of football, to see two teams trained for this final contest and ready to fight with the last ounce of strength that was left in them, one eleven to fight for Drury and the other eleven to fight for old M. S. M. The contest was a good one, but it was one-sided. The Miners were too much for the Springfield boys and the game ended with the scoreboard showing the final score of 37 to 5 in favor of the Miners.

The 1911 football season has been considered the most successful season in the history of the School. It was the first year that Missouri failed to score on us and the school and team feels justly proud of the honors that were gained by the team for the School, both as good football players and as gentlemen, on the gridiron as well as off it.

The team was recognized as one of the best in the State and in picking the All-Missouri team, the St. Louis papers placed four of our players on that exalted eleven; namely, Blake at end, Macomber at halfback, Andrus at guard, and Wagstaff at halfback.

After the season was ended the Faculty gave a banquet to the football team. Dr. McRae acted as toastmaster and toasts were responded to by Captain Blake, Macomber, Wagstaff and Forrester of the team, and also by members of the faculty.

With Captain-elect Andrus back to lead the Miners next year and with eight "M" men back with him, M. S. M. surely ought to have another winning team for 1911, and the four "M" men who graduate this year will be behind "Andy" and his team as loyally as if they were helping to force the pigskin over the goal line.



FOOTBALL SQUAD

"M" Men in Football



T. W. BLAKE, *Captain*, Left End and Quarter Back.

"Red" was given a place on the All Missouri for his experience and consistent hard playing. He is very fast and a sure tackle, hence an excellent man for running down punts. "Red" is also a proficient quarter back whose generalship was always admired by the rooters. He leaves us after four years of aggressive playing upon graduation this spring.

D. E. ANDRUS, *Captain-elect*, Right Tackle.

"Big Andy" opens up a hole big enough for a hay wagon to go through, when the play comes his way. His tackles are hard and fierce, the kind that make you shut your eyes and pity the opposing team. "Andy" won a place on the All-Missouri team and was elected captain for next year. Everyone has confidence in the big boy and we know that he will make good as captain.



S. C. MACOMBER, Left Half Back.

"Mac" is without doubt the best football player in Missouri at the present time. He has been chosen for the All-Missouri for three consecutive years. Too much can not be said of "Mac," for besides being an excellent athlete he is a prince of good fellows. We hate to think that he has donned a padded uniform for M. S. M. for the last time. "Mac" has won a place in the heart of every Miner, and in the history of M. S. M. football that will live forever.

D. L. FORRESTER, Quarter Back.

"Red's" generalship and cool-headedness enabled him to run the team in an excellent manner. He is clever and accurate at throwing the pig-skin and many long gains were made through his passes. "Red" is a hard player and fills his team mates with confidence. Graduation makes this his last year. He leaves a vacancy that will be hard to fill.





R. A. WAGSTAFF, Right Half Back.

"Wag" came from Drury with a good reputation and gained a better one. He made an excellent running mate for Macomber, and the two were considered the best pair of backs in the State, both being chosen for the All-Missouri. "Wag" made many big gains for M. S. M. and was a strong man on defense. He has another year to star for his college.

N. W. RAIBLE, Full Back.

After holding down a place on the side lines for two years, "Doc" won a place on the team and developed into one of the best line plungers ever seen with M. S. M. In the Arkansas game he found no trouble in going twenty yards through the center of the line. "Doc" is equally good on the defensive and is expected to be the best full back in the West next season.



L. L. LODWICK, Left Tackle.

They say that a line man never gets into the lime light. This was not true of "Ollie" for his getting through the line and busting up plays was very spectacular. He is a stone wall on defense and on offense can make a hole in any line. "Ollie" has three more years of gridiron life before him and wonders are expected of him.

M. H. DETWEILER, Right End.

"Little Det" with little or no previous football experience developed into a player of the first water under Dennie's careful coaching. He has all the natural requirements for an end, speed, size, and plenty of grit to back it up with. "Det" was a good ground gainer both on end runs and receiving the forward pass. A diploma is being engraved for him this spring, and so he will not star on the gridiron for M. S. M. again.





J. A. MURPHY, Left Guard and Center.

"Pat" insists that football is an Irish game and his plunging would almost convince you that it is. He started out a guard but was later shifted to center, which under the new rules is one of the most responsible positions. His passing was snappy and accurate and he always got the jump on his man. "Murph" has two more years at M. S. M. in which to show his strength and sand.

J. N. SCHMIDT, Left End.

The new rules made the end place one that was full of difficulty and hard to cover. But "Johnny" was always ready and never was found wanting. He came with considerable experience gained in the "Windy City" and through Dennie's coaching has developed into one of the best men M. S. M. has ever had on her gridiron. With such a start and three more years to play, we expect to see him take a leading place in M. S. M. football.



R. J. KNICKERBOCKER, Left Guard.

"Knick" always held his own at guard and never let the opposing man slip anything over on him. He often brought the crowd to its feet with a brilliant tackle. His size is a great handicap, but his love of the game and his grit makes him a very valuable man. With two more years to play, a bright career is surely in store for him on the gridiron.

H. K. SHERRY, Center.

Through hard training and constant plugging, "Homer" finally won a place on the team. His playing was quick as a flash and he fought with every ounce of strength that was in him. His passing was good for the most part, although at times he had difficulty in getting the ball to "Mac" for a punt. He will be a great help to the team next year.





C. L. CONWAY, Guard, Full Back and Tackle.

Conway was used in nearly every position on the team, and showed equal skill in all. He is a good ground gainer when in the back field, and a sure and hard tackler. In the line he is impenetrable and was never known to let a man get past him. He will be out for M. S. M. next season.

1910 Schedule

Central College -	5	Miners - - - -	19
Missouri University	0	Miners - - - -	0
St. Louis University	3	Miners - - - -	0
Kansas Agricultural			
College - - -	23	Miners - - - -	3
Springfield Normal	0	Miners - - - -	24
Arkansas University	6	Miners - - - -	2
Drury - - - -	5	Miners - - - -	37
TOTALS			
Opponents - - - -	42	Miners - - - -	85

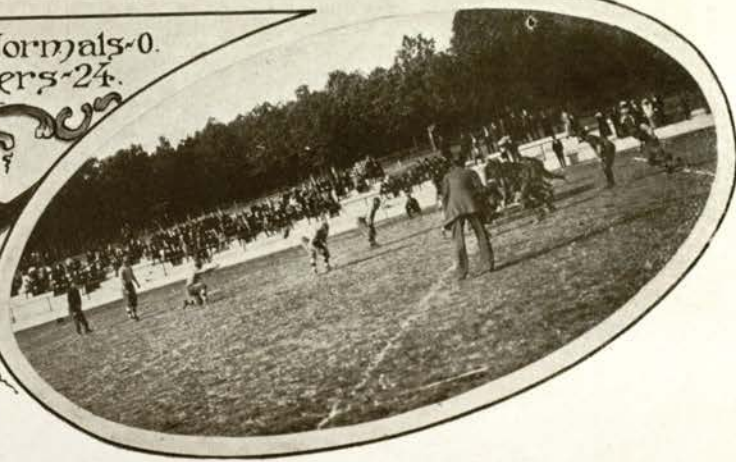




Miners Kicking Goal

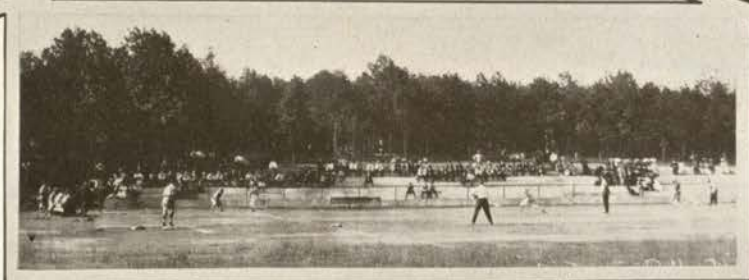


Springfield Normals-0.
Miners-24.



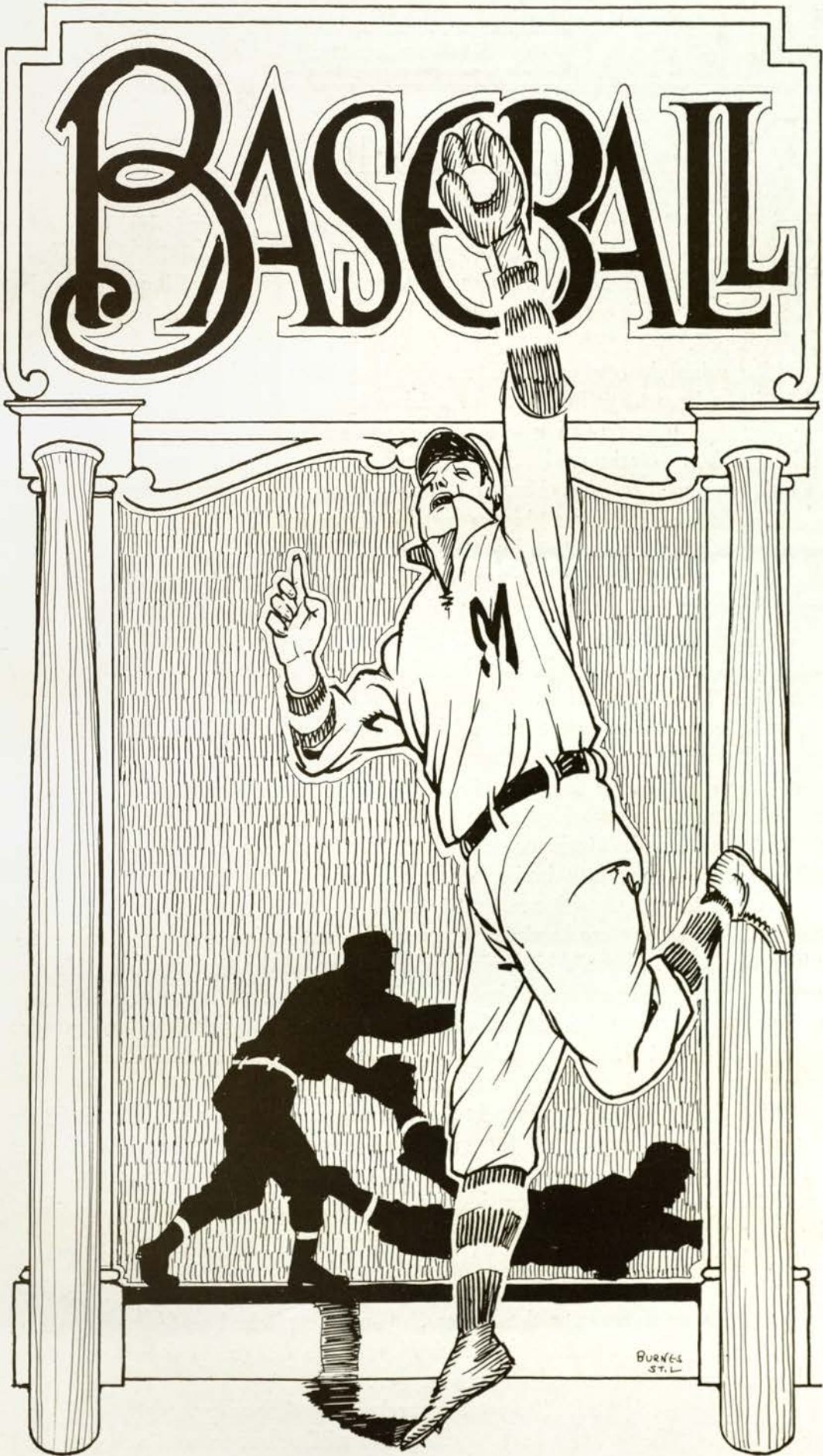


~ Miners-57 ~ C.B.C.-47 ~



~ Miners-8 ~ Drury-6 ~







Baseball



SPRING brought out a large but green squad of material, with only two of the old men about which to build the team. With the weather bad and the hardest games first, prospects were anything but promising, and it was not until half the season was over that a good team was developed.

The schedule opened with two games at Fayetteville against Arkansas University, whose team had been practicing and playing for over two months. The Miners, outclassed owing to inexperience and lack of confidence, made only a fair showing. Geringer, in the box for M. S. M., pitched good ball all but two innings, and then several errors helped Arkansas to score their runs.

Kurz started out like a "big leaguer" in the second game and held Arkansas to a single hit for five innings, but then he and the team "blew up" and did not settle down until the game was sewed up. Baber, Arkansas' star pitcher, was very effective, allowing the Miners but one hit and striking out thirteen men.

Downhearted over their defeat, the team journeyed to Springfield to lose a poorly played contest against Springfield Normals. The field was rough and most of the faults due to it worked against us.

The team had no better luck against Drury the next day, but signs of team work and confidence began to show. Wagstaff's good pitching and a few bad errors gave the game to the Springfield team. We easily defeated Drury in the second game by the one-sided score of 20 to 6. Every Miner hit the ball hard and fielded well, while Geringer struck his stride in the box and did not let down until the last of the ninth inning was played.

Home at last and with new spirit, the team beat Drury in two well-played games. The games were hard fought up to the last inning and both took extra innings to decide. Porri's hitting was the feature of the first contest. He got four wallops out of five times at bat. Geringer pitched the best game ever seen on our campus and pulled himself out of several bad holes during the struggle. Engleman duplicated Porri's batting feat in the second game, while Kurz pitched almost perfectly and received excellent support.

Christian Brother's College broke our winning streak at St. Louis in an errorless game. Kurz started the game but was replaced by Geringer in the first inning after four runs were scored. From then on the game went in "one, two, three" fashion with neither side getting another chance to cross the plate. The game was featured with spectacular playing, both teams getting their share of the pretty plays.

The last game of the season was played at Rolla against Shurtleff College, and was an easy victory for the Miners. Geringer pitched a steady game and was backed up well. Batting by Cushwa was the feature of the game. The big boy got a home run and a three bagger.

Never before in Rolla has a team worked together as smoothly as did the nine of 1910. They were a hard working and willing bunch, and well deserved the honors they won.

"M" Men in Baseball



E. W. ENGLEMAN, Captain and Short Stop.

"Hungry's" playing is classy and of the kind that inspires confidence in his team mates. His fielding is fast, sure, and backed up with a strong accurate arm. He batted strongly and steadily, his hits scoring many of the runs earned by the Miners. "Hung" was a good leader and found no trouble in settling arguments. He played a good game and kept his men in good cheer. He will be back this spring to hold down a position in the infield for his fourth and last year, and the same good work is expected of him.

W. PORRI, Captain-elect and Third Base.

Bill made the team "right off the jump" in his first year and he has been a fixture at third base ever since. In batting he has always led the team, and his long drives have won for him such a place in the hearts of the fans that when Bill steps up to the plate everyone is confident that something is going to happen. He is one of those snappy fielders and aggressive players that keeps his team mates on the alert. Under Bill's direction the team should be a great success this season.



R. C. THOMPSON, Second Base.

"Tommy" had several rivals for his position, but his steady way of picking up a grounder gave him a regular berth from which no one was able to "oust" him. He was never known to make a grand stand play, but he got everything between first and second base in easy style. His graduation prevents his coming back this year, a fact much regretted by all the fans.

R. N. COPELAND, First Base.

"Bob" played his first year of Varsity baseball in a way that speaks well for his future. His ability to gather in the high and wide ones as well as the low ones made him a valued man on the initial sack. "Bob" clouts the ball hard and his long free swing is dreaded by all pitchers. More will be seen of him this year.





O. C. WEMHANER, Catcher.

In one season "Goog" developed into one of the best as well as one of the noisiest catchers ever seen in Rolla. His work was marked with an enthusiasm which made his pitcher give all that was in him. "Goog's" one object in life was to catch Coach Dennie stealing second. He was a valuable man, and his position is going to be a hard one to fill as well as he filled it.

O. G. GERINGER, Pitcher.

"Gerry" earned the reputation of being the best pitcher as well as the most conscientious worker that ever donned a Miner's uniform. He had a good arm, worlds of speed, snappy curves, excellent control, and a cool clear head. "Gerry" won praise whenever he worked, but, unlike others, was not affected by it. Besides being a good pitcher he was a batter of quality. He got his hits when they were most needed, and seldom struck out. He will not be out with us this year, and his loss will be much regretted.



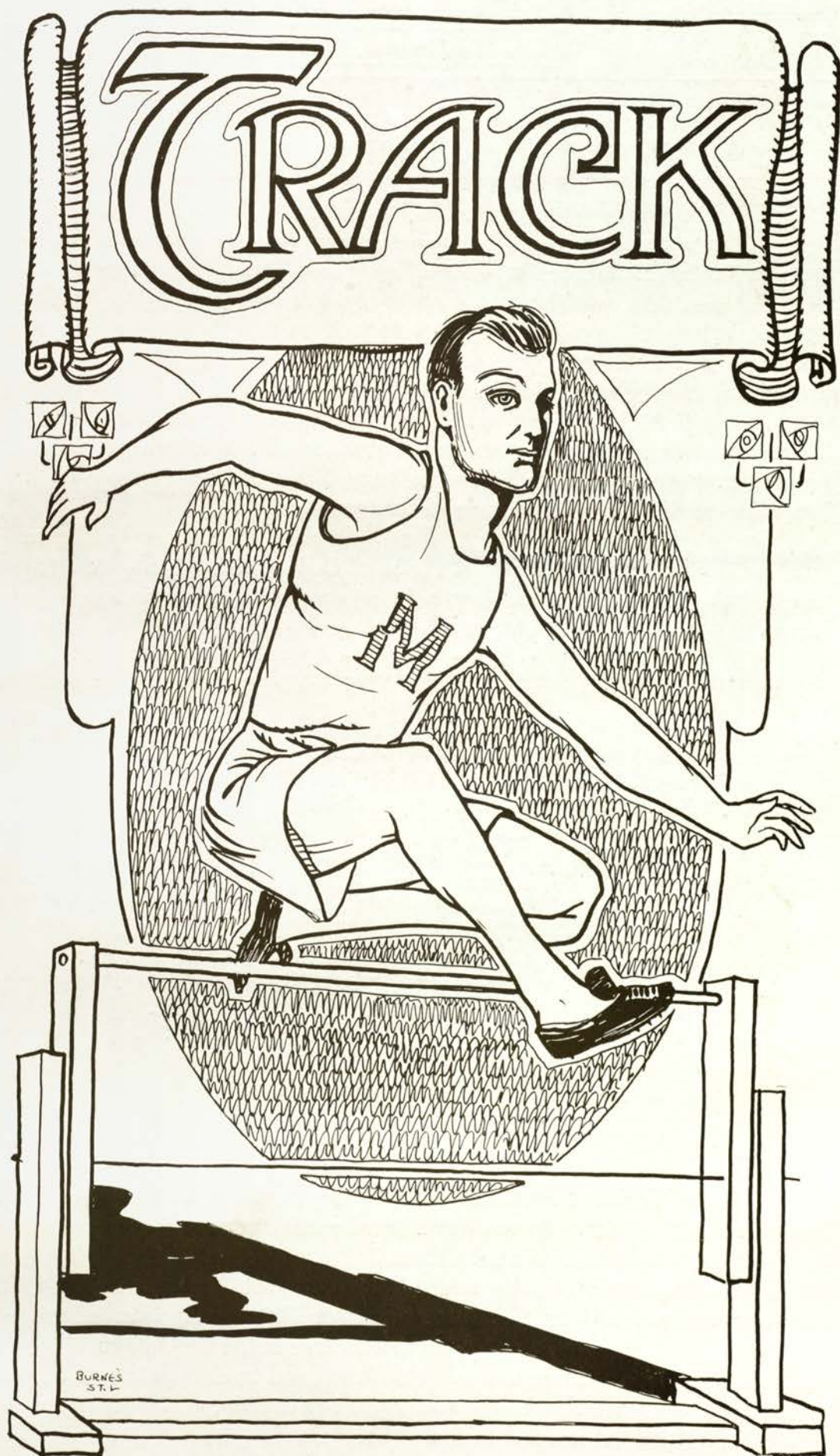
J. A. KURTZ, Pitcher.

"Addie" had lots of speed and good curves, and the only way that we can account for his not winning most of his games is by the bad luck and poor support that followed him throughout the whole season. His pitching won the first Drury game in Rolla and would have been a credit to any one. Kurz will be back with us this season and should be a first-class box artist.

N. W. RAIBLE, Left Field.

"Doc" took care of the sun garden in grand style and caught all the flies that disturbed his peaceful sleep. He was a sure catch and could throw to the plate with great accuracy. "Doc" had a good batting eye and hit the ball hard. He will be out this season to hold the left field position down again.







Track

THE opening of the season of 1910 saw M. S. M. as strong as ever in track, and the reputation gained many years ago was upheld in good shape another season. The Miners have always been strong in track and they could be even stronger if they would go into fall training a little more vigorously and have a cross-country run as they did two years ago. It would be well if the Athletic Association would pay more attention to this preliminary training as it is invaluable to the track team.

Although the loss of Barrett, Mazany and Loveridge was keenly felt, we had a great addition in Young, the crack quarter and half miler, and Knickerbocker, another middle distance man. Leasure, Townsend and Marshall deserve honorable mention as coming stars and hard workers.

On May 12th was held the first and only meet on our new quarter-mile track on Jackling Field. Christian Brothers' College of St. Louis opposed us, and though we defeated them, they certainly outclassed us in the hurdles and jumps.

Record of the Meet

Event	First	Second	Time or Distance
High Hurdles	Macomber	C. B. C.	17 1-5 sec.
100-yd. Dash	Porri	C. B. C.	11 sec.
220-yd. Dash	C. B. C.	C. B. C.	24 2-5 sec.
440-yd. Run	Young	Knickerbocker	54 3-5 sec.
880-yd. Run	Knickerbocker	Young	2:13.
Mile	Farrar	Lynton	5:9 1-5.
Pole Vault	Macomber	C. B. C.	10' 5 1-2".
High Jump	C. B. C.	C. B. C.	65 1-2".
220 Hurdles	C. B. C.	C. B. C.	27 3-5. sec.
Shot Put	Macomber	C. B. C.	40' 10".
Hammer Throw	Macomber	C. B. C.	112'.
Two-Mile Run	Lynton	Leasure	19:56.
Discus	C. B. C.	Macomber	102' 6".

Score: M. S. M., 63; C. B. C., 49.

We had received an invitation to send a team to the Western Conference Meet, held on Christian Brothers' College campus, under the auspices of the Missouri Athletic Club. So on May 21st, the Athletic Association sent three men to represent the school, Captain Farrar, Macomber, and Lynton. Considering that these men were meeting some of the best athletes in the State, they did not do so badly since Farrar captured third place in the half mile, Macomber third place in the shot put, and Lynton fourth place in the five-mile run.

At the time of writing, the prospects for a good track team for the season of 1911 are very bright. With Macomber as our captain, and most of the old men back, we ought to do great things.

“M” Men in Track



C. W. TRAUGHER, *Captain.*

“Skeeters” was always good for five points in every meet. In his four years on the Miners track team he lost the broad jump only a single time. He holds the school record of 20' 10½" in that event. “Skeeter” is a fine trainer, and in that respect set the rest of the team a good example. Graduation prevents his being with us another year.

S. C. MACOMBER, *Captain-elect.*

“Mac” is the best all around athlete in the State, and can make good at nearly anything he tries. He holds the school record for the shot put and pole vault, and is a sure point winner in the hammer throw, the discus, and the high hurdles. For his good work “Mac” was elected captain of the 1911 team, and he has our best wishes for a successful season.



MONROE FARRAR.

For four years he represented the Miners in the mile and half mile in a way that made us desire no better representative. Farrar won his “M” for four years and held the captaincy in 1909 and ended his track career last spring in a blaze of glory.

W. PORRI.

“Bill” came to school with a fine interscholastic record as a sprinter, and his performances in the dashes more than sustained the reputation which had preceded him here. Though “Bill” is faithful to the baseball team, he always finds time to win five or ten points for the track team.





E. LYNTON

"Teddy" has a mechanical stride and a durability which makes his running seem easy and natural. It makes little difference to him whether it is two or ten miles he is running, we can always rely on him to come in first. "Teddy" will be with us again this spring and is expected to break his record of 30:40 in the five-mile run.

C. D. YOUNG

"Cy" has a stride nearly twice as long as the ordinary man's, and finds little trouble in beating any one that starts against him. He is a hard trainer, and as a result has wind and endurance enough to finish the half mile with but little exertion. "Cy" has a big field before him, and in his two more years at M. S. M. should have no trouble in winning many points for his college.



G. KNICKERBOCKER

Knick was a dark horse, and his winning of the quarter-mile in the C. B. C. meet was little expected. He has good form and lots of wind and speed. With three more years of work before him he ought to develop into one of the best middle distance men the school has ever had.

Track Records

Event	Record	Holder	Year Made
100-yard dash - - - - -	:10 1-5	K. V. Moll	1902
220-yard dash - - - - -	:23 1-5	Will Porri	1909
440-yard run - - - - -	:53 1-5	F. O. Blake	1908
880-yard run - - - - -	2:4	G. H. Boyer	1906
Mile - - - - -	4:40	G. H. Boyer	1906
Shot put - - - - -	39' 9"	S. C. Macomber	1908
Hammer throw - - - - -	118'	M. S. Mazany	1909
Discus throw - - - - -	111' 6"	E. P. Barrett	1908
High jump - - - - -	5' 7"	John Graves	1905
Broad jump - - - - -	20' 10½"	C. W. Traugher	1909
Low hurdles - - - - -	:25 4-5	M. S. Mazany	1909
High hurdles - - - - -	:16	M. S. Mazany	1909
Pole vault - - - - -	10' 9"	S. C. Macomber	1909
Five-mile cross country - - -	30:40	E. D. Lynton	1908





Basketball



QUITE disappointed over not having a large schedule, not much interest was shown in basketball, at least by the men out for the team. Rules of training were not strictly lived up to and practice was irregular. There was excellent material in school, however, and the team was not by any means a bad one, although it could have been greatly improved by more regular practice and a little more attention to training.

Springfield Normals were the first to meet us and were easily defeated by the one-sided score of 47 to 23. Everybody was surprised by the fine condition and speed shown by the Miners. Kurz and Porri did most of the shooting, while Lodwick's debut on the basketball floor was not without sensational playing.

The next week, tables were turned at Springfield in a rough and tumble match on a court not much larger than a ping-pong parlor. The Normal team had the advantage of knowing the floor and beat us in the last few minutes of play, the final score being 16 to 11.

Disabled from the battle of the night before, the Miners took another drubbing from the fast and well-trained Drury five. The game was clean and hard fought with the shooting of the home team as its feature. Our guards, fighting as they did, could not stop this for the Drury forwards shot baskets from any and all angles with equal certainty. The game ended with the score of 33 to 17 in favor of Drury.

Cape Girardeau Normal was the next team to meet the Miners and were lucky enough to carry off the honors of the day. A certain ruling by the Cape coach, who was refereeing the game, gave the visiting team a big advantage, and they piled up 22 points to our 2 before the Miners objected and adjusted matters. From then on the Miners had the best of the playing and scored more baskets than the Normals. The game was very exciting and for a time it looked as though our men would overtake the Cape team, but the whistle blew with the score 33 to 28 against M. S. M.

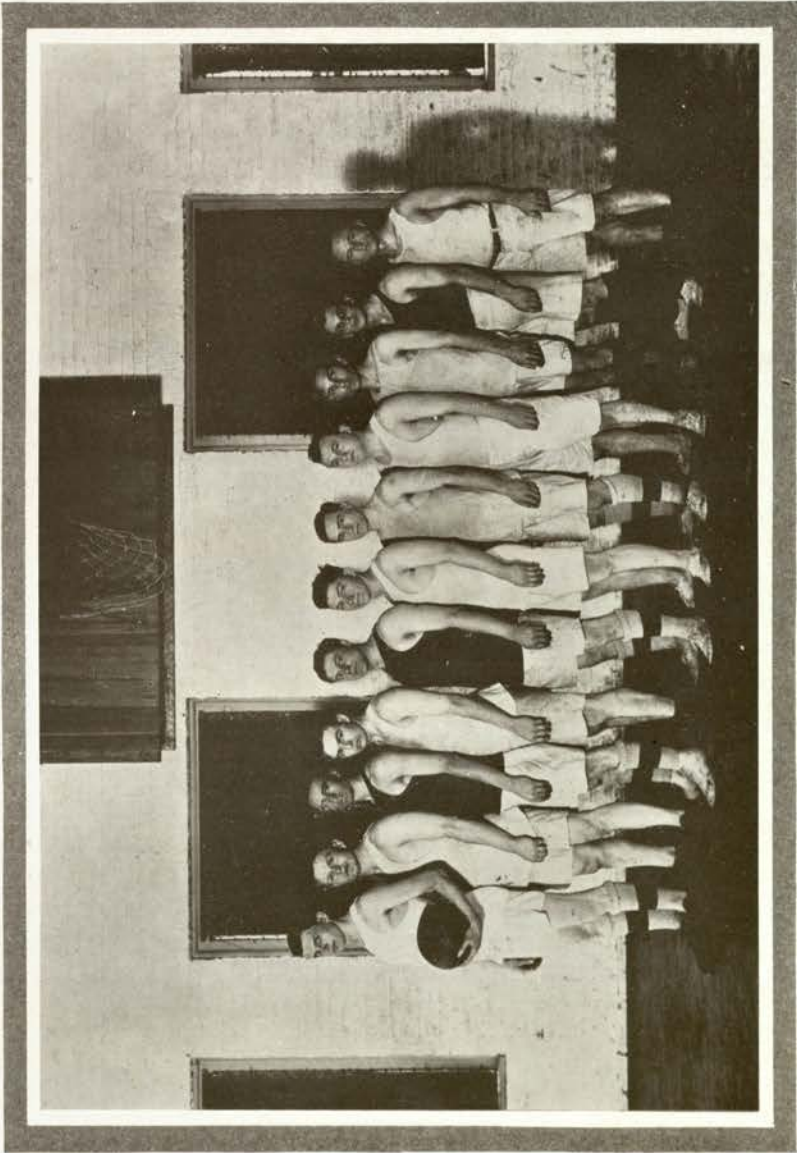
The last game of the season was against Drury, and was another defeat for the Miners. Again Drury was outplayed in all points except in shooting baskets. Drury had the best pair of forwards seen on the local floor for many years and their basket-shooting was no discredit to our guards. Every Miner gave all that was in him and the game proved exceedingly interesting, though the score was very one-sided.

The prospects for a better schedule and a winning team for next year are very good, since there are many youngsters in school, who, under Dennie's coaching, will make good men.

Lineup

J. A. KURZ, Captain and Center
WILL PORRI, Left Forward
M. ALBERTSON, Right Guard

N. W. RAIBLE, Right Forward
L. LODWICK, Left Guard
E. W. DAMOTTE, Substitute



BASKETBALL SQUAD

“M” Men in Basketball



J. A. KURZ, Captain and Center.

Endowed with a great height, Kurz makes an ideal pivot man. He out-jumped every man that played against him during the season, and always started the ball in the right direction. “Addie” has a good eye for baskets and made quite a record at throwing fouls. He was the mainstay of the team until sickness made him drop out of the game. Graduation makes this his last year with the team, and his loss will be keenly felt.

M. ALBERTSON, Right Guard.

Short and stocky is “Al,” but his bull-dog disposition and speed made him a valuable man. He was the hardest worker on the team, and never let up until the last whistle blew. He is full of fighting spirit, and any one trying to rough it with him found that they had butted into a stone wall. Graduation will leave his place on the team vacant and it will be hard to find any one who will fill it as well as he did.



L. L. LODWICK, Left Guard.

The big Freshman played a whirlwind style of game the entire season and could cover the whole field in a few strides. By virtue of his great height, “Ollie” intercepted many of the long passes, and was therefore good at “feeding” the forwards. He has a good eye, and shot more baskets than any other man on the team. “Ollie” has three more years to play with us, and should develop into one of the best players in the State.

N. W. RAIBLE, Right Forward.

Three years on the 'Varsity has made “Doc” a neat, clever, and aggressive player. He started out as guard, but his good eye made it wise for Coach Dennie to switch him to the shooting line. Needless to say that he made good there. “Doc” has one more year to play, and should be the team's star next year.





WILL PORRI, Left Forward.

“Bill” certainly showed what was in him in the Drury game, and a large percentage of the points scored in that game were made by him. He has a fine eye for the basket and was one of the fastest men on the team. He has one more year to play, and will certainly be one of the stars if he lives up to his past performances.

M. S. M. Alma Mater

On Ozarks' height there stands our pride,
In mountains bold reclined,
Midst lofty crests on many sides,
Protection thus designed;
Thy campus, courts, and Jackling Field,
With pleasant memories fill
Our future thoughts as back they reel,
To Norwood on the hill.

Oh! Happy student hours that fly
Unheeded as the clouds,
That float beneath, the dome on high,
And Heaven's vault enshroud;
In mining camp or other trails
The future may hold forth,
Thy strong, uplifting love ne'er fails
To stimulate our worth.

On glide the years that only tend
To bind dear M. S. M.
Close in our hearts that never rend,
To loose the love therein;
To M. S. M. then, raise the cry—
Our ALMA MATER, hail
Ring out the slogan to the sky,
Thy sons can never fail.



~ Mineralogy ~



~ Surveying ~



~ Geology ~



~ Assaying ~



~ Mining ~



~ Machine Shop ~



~ Dynamo ~

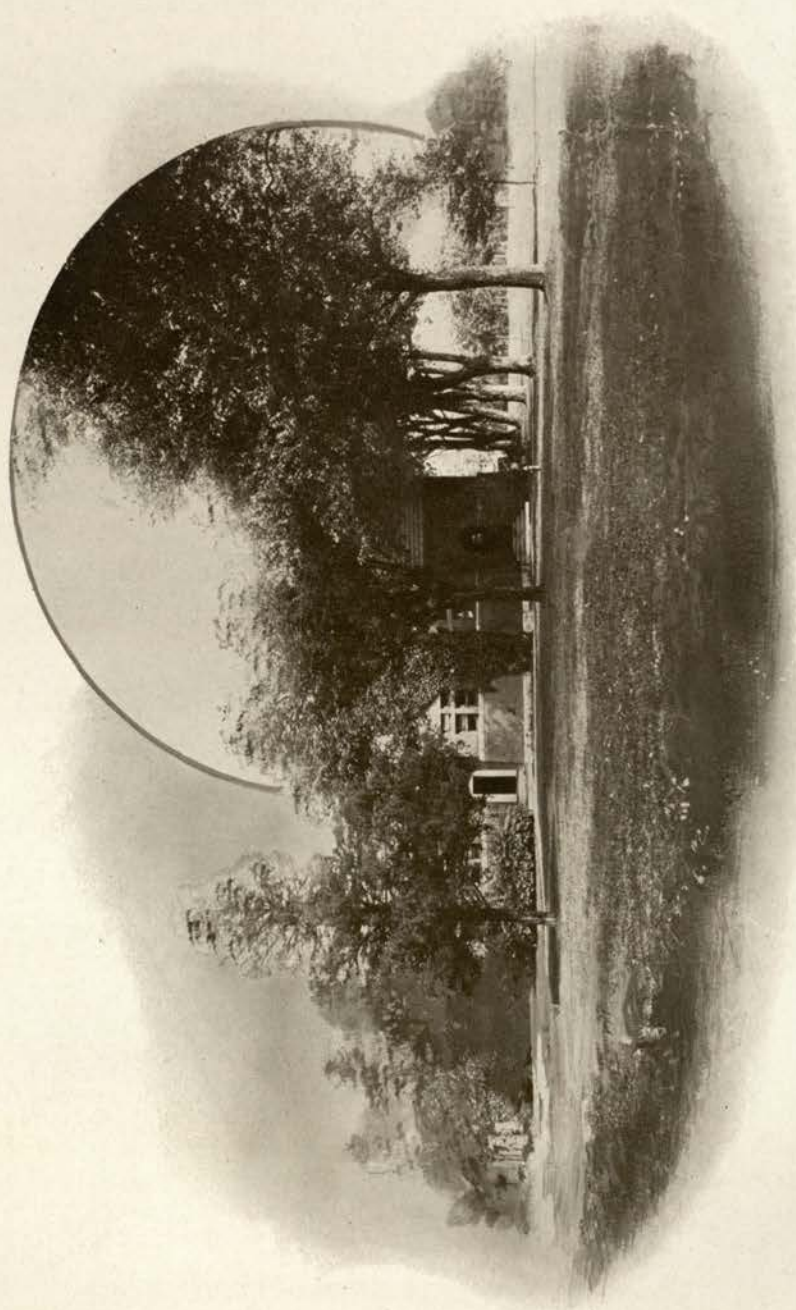


~ Assaying ~

BOOK IV.

FRATERNITIES





MINING BUILDING







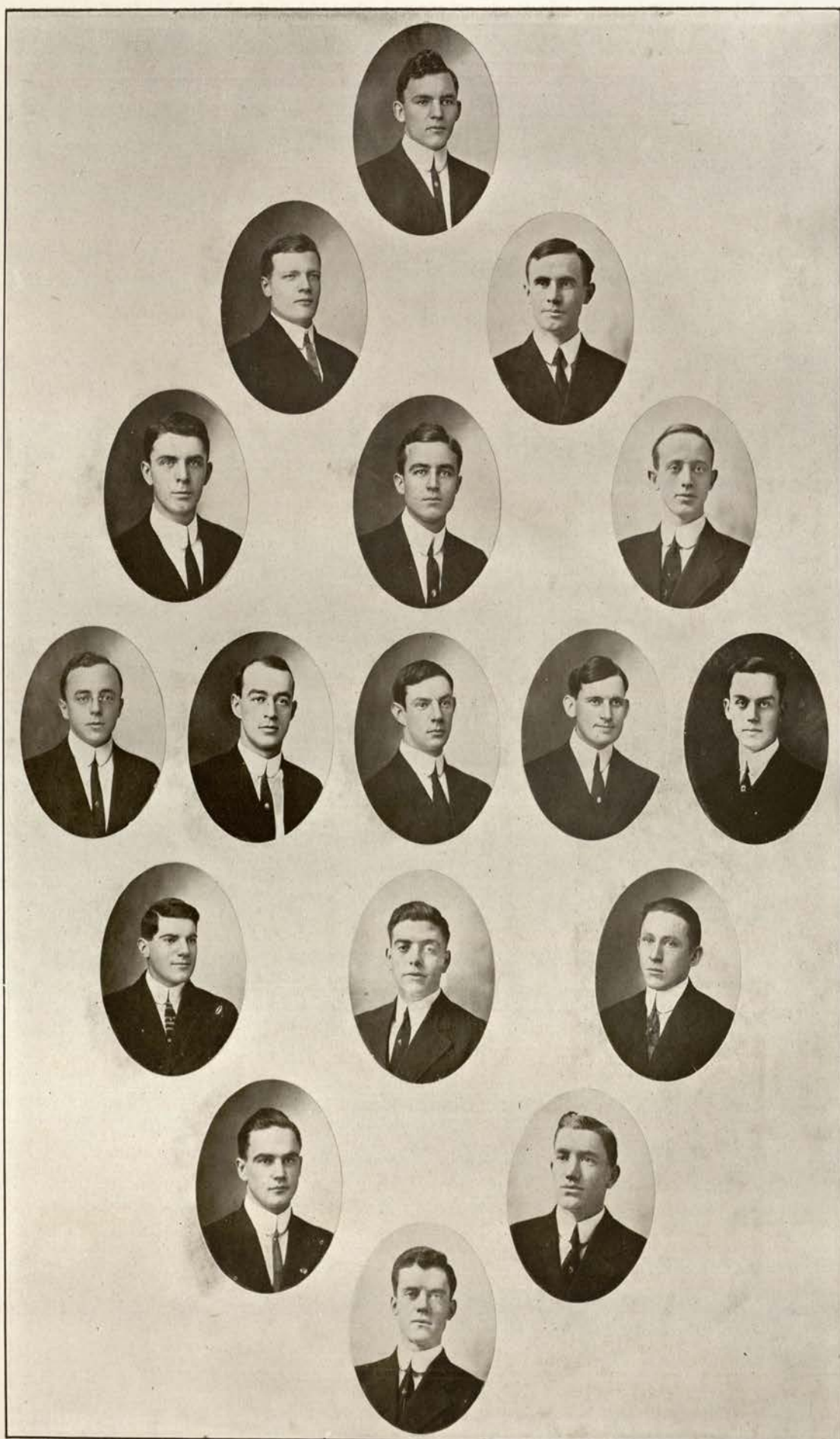
Sigma Nu Fraternity

Founded at Virginia Military Institute, January 1, 1869.

Colors: Black, White and Gold.

Flower: White Rose.

Publication: The Delta.





Gamma Xi of Sigma Nu

Installed January 23, 1903

Chapter Roll

R. N. COPELAND

D. I. HAYES

L. J. BOUCHER

J. H. CHASE

F. P. DICKSON

C. D. YOUNG

H. I. BROOKS

C. R. MILLER

J. F. SEWARD

H. T. MARSHALL

C. W. WRIGHT

H. H. NOWLAN

E. A. KAYSER

T. B. E. McCLURE

E. C. McFADDEN

F. M. JONES

W. W. MILLER



Pan-Hellenic Baseball League



HE Pan-Hellenic Baseball League was organized in 1906, and is composed of a team from each one of the four fraternities. At the end of each year the team having the highest percentage takes possession of the silver trophy cup and holds it until the end of the following season when it is again awarded to the team with the highest percentage. Any fraternity may gain permanent possession of the cup by winning it for three consecutive years. Kappa Sigma Fraternity has won the cup for the last two years.

Since the league was organized the cup has been held as follows:

1906.....	Kappa Sigma
1907.....	Kappa Alpha
1908.....	Kappa Alpha
1909.....	Kappa Sigma
1910.....	Kappa Sigma

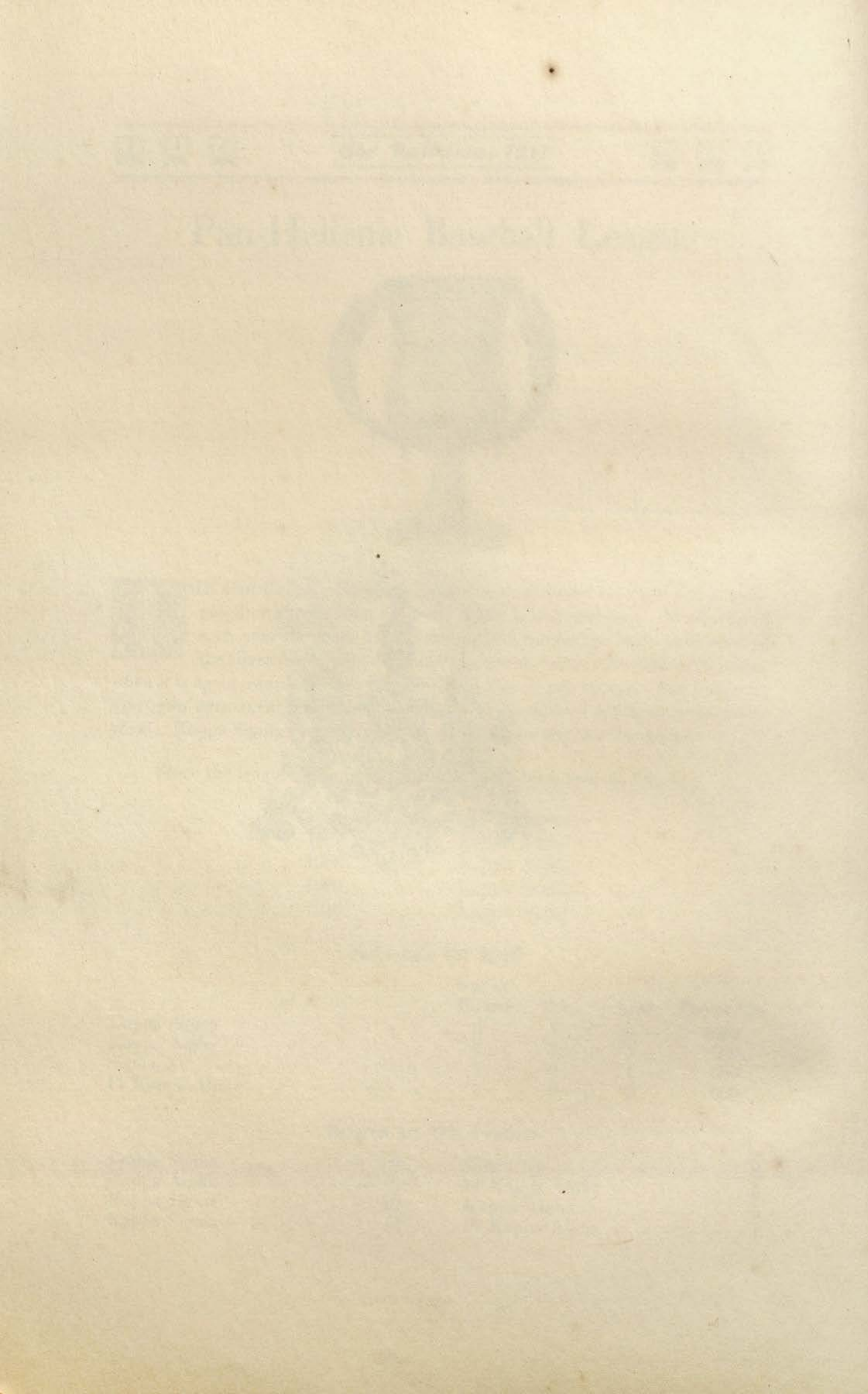
Schedule for 1910

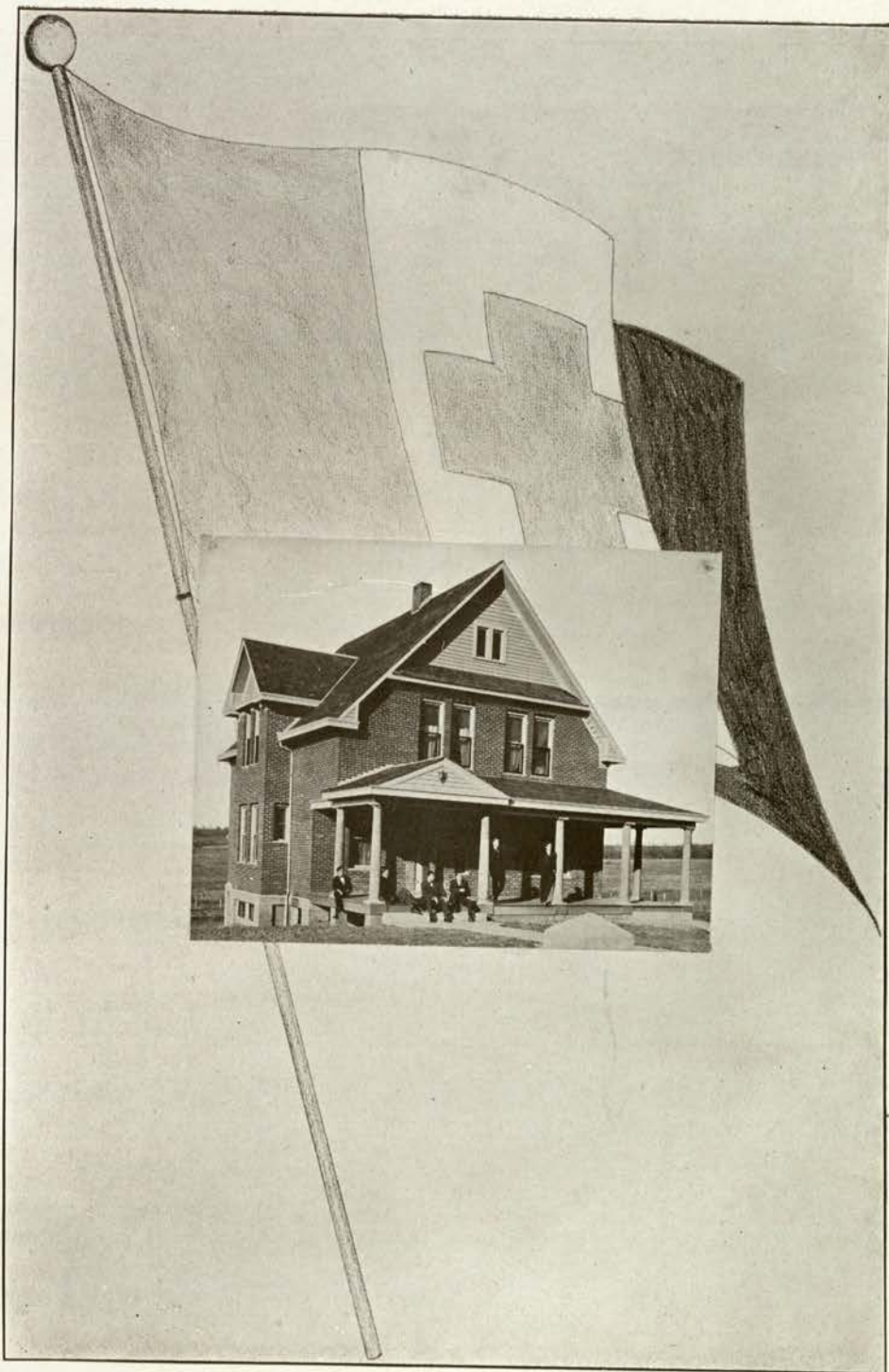
	Games Played	Won	Lost	Percentage
Kappa Sigma - - - - -	3	3	0	1000
Kappa Alpha - - - - -	2	1	1	500
Sigma Nu - - - - -	1	0	1	000
Pi Kappa Alpha - - - - -	2	0	2	000

Scores in the Games

Kappa Sigma - - - - -	9	Sigma Nu - - - - -	8
Kappa Alpha - - - - -	9	Pi Kappa Alpha - - - - -	5
Kappa Sigma - - - - -	10	Kappa Alpha - - - - -	5
Kappa Sigma - - - - -	14	Pi Kappa Alpha - - - - -	1







Kappa Alpha

Founded at Washington and Lee University, 1865.

Colors: Crimson and Gold.

Flowers: Red Rose and Magnolia.

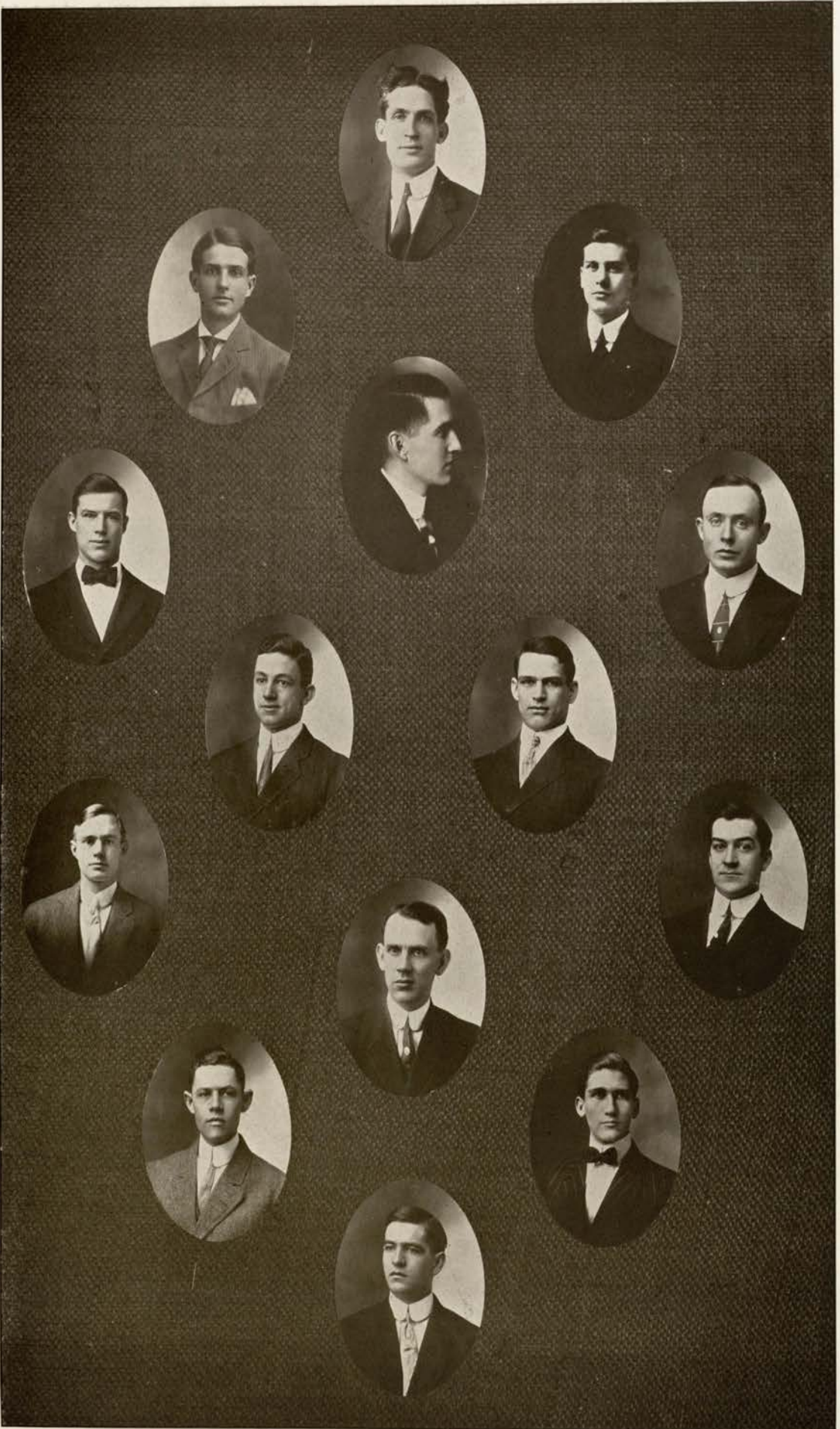
Beta Alpha Chapter

Established April 27th, 1903

Active Chapters, 48.

Alumni Chapters, 70.

Publication: Kappa Alpha Journal.





Kappa Alpha

Beta Alpha Chapter

Chapter Roll

Fratres in Urbe

CHAS. L. WOODS

ALEXIS XAVIER ILLINSKI

Fratres in Universitate

Seniors

DUNCAN SLATER SMITH

EDWARD WILLIAM ENGLEMAN

SUMNER COOLEY MACOMBER

JOHN RICHARDSON KENNEY

FRANK HORATIO WINSOR

Juniors

LOUIE LINCOLN COOVER

RICHARD ALEXANDER WAGSTAFF

LEONARD STEPHEN COPELIN

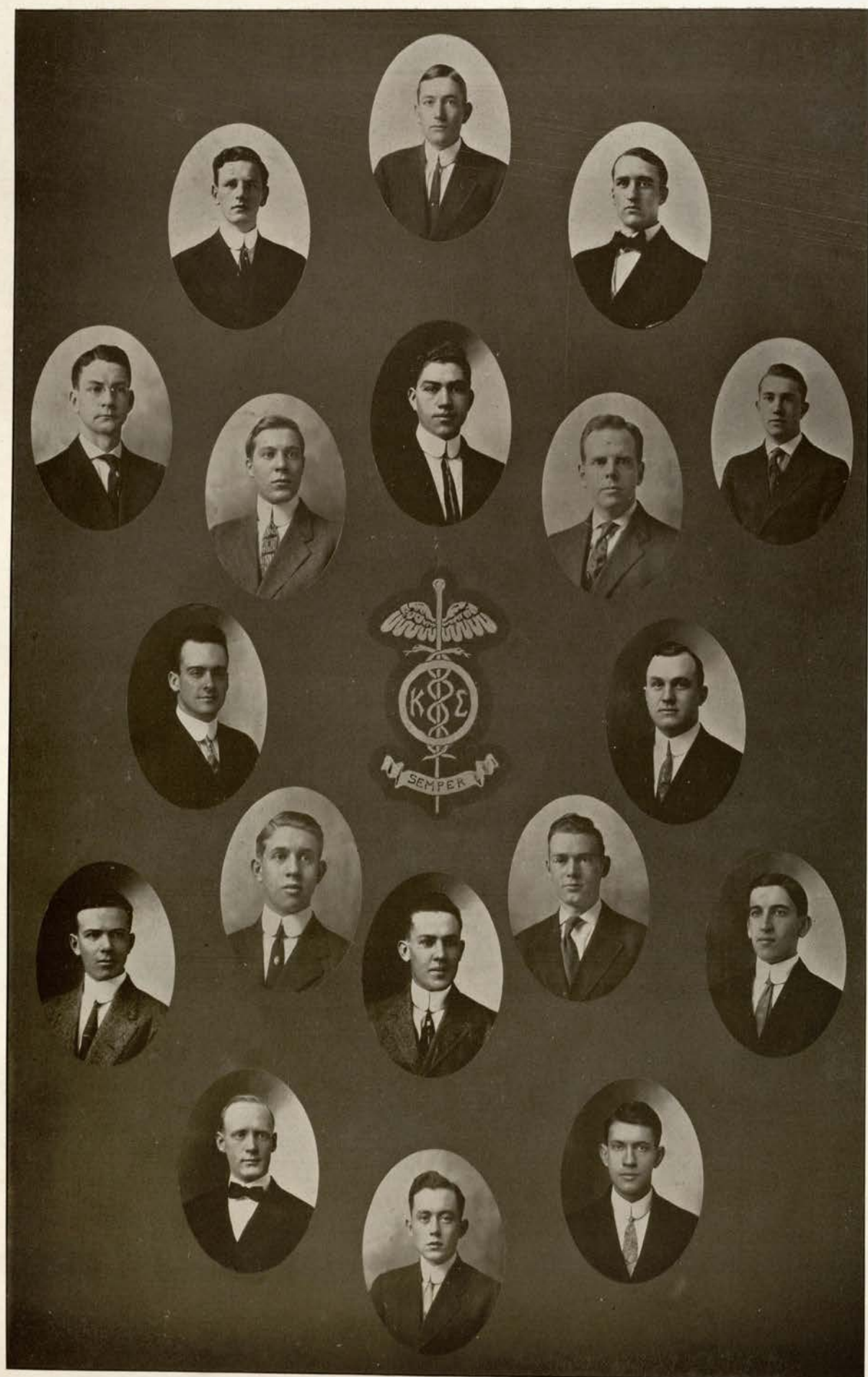
CLIFFORD LE ROY CONWAY

CLARK WALTER ADAMS

Sophomores

CHARLES YANSEY CLAYTON

JOHN ANDREW MURPHY





Kappa Sigma

Beta Chi Chapter

Installed December 19, 1903

Fratre in Urbe

VICTOR HARMON HUGHES

Fratres in Universitate

Seniors

DAVID LAWTON FORRESTER
JAMES EDWARD MCGOUGHAN
FRANK JAMES FLYNN
JOHN CHARLES CLARK

BENJAMIN HORACE CODY
JAMES LAWTON KEELYN
HECTOR JOSE BOZA
HARRY WILLIAM LEE PORTH

Juniors

GEORGE SYLVESTER THOMAS
NORMAN WILLIAM RAIBLE

ARTHUR WELLESLEY HACKWOOD
MILLER EDWARD WILLMOTT

Sophomores

RUSSEL BANTA MCFARLAND
JOHN NIXON WEBSTER

FRANK WESLEY CODY
WILLIAMS EHLERS, JR.

Freshmen

LEE REED BOWMAN

THOMAS RAE THOMAS



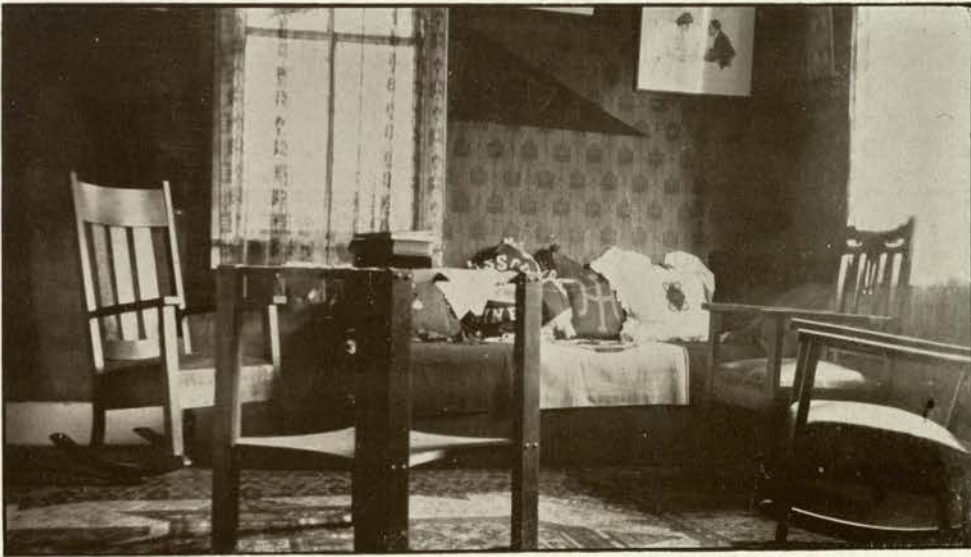
Stray Greeks

In the Faculty

DR. A. L. McRAE	$\chi \phi$
DURWARD COPELAND	ξP
G. H. COX	$A \chi \xi$
C. R. FORBES	ξP
F. E. DENNIE	$\theta \Delta \chi$
J. W. EGGLESTON	$\psi \tau$

In the School of Mines

D. E. ANDRUS	$\phi \kappa \xi$	- - - - -	University of Wisconsin
A. W. GLEASON	$\phi \kappa \gamma$	- - - - -	Bucknell College
J. R. JAMES	$\xi \chi$	- - - - -	Mass. Institute of Technology
E. D. KATZ	$\kappa \gamma$	- - - - -	Cornell University
S. P. LINDAU	$\phi \Gamma \Delta$	- - - - -	William Jewell College
J. C. NEWELL	$\theta \Xi$	- - - - -	Rose Polytechnic Institute
D. L. STRICKLER	$\phi \kappa \gamma$	- - - - -	Purdue University
H. L. TEDROW	$\xi \chi$	- - - - -	University of Missouri



Pi Kappa Alpha

Founded at University of Virginia, March 1st, 1868

Alpha Kappa Chapter

Installed, December 2nd, 1905

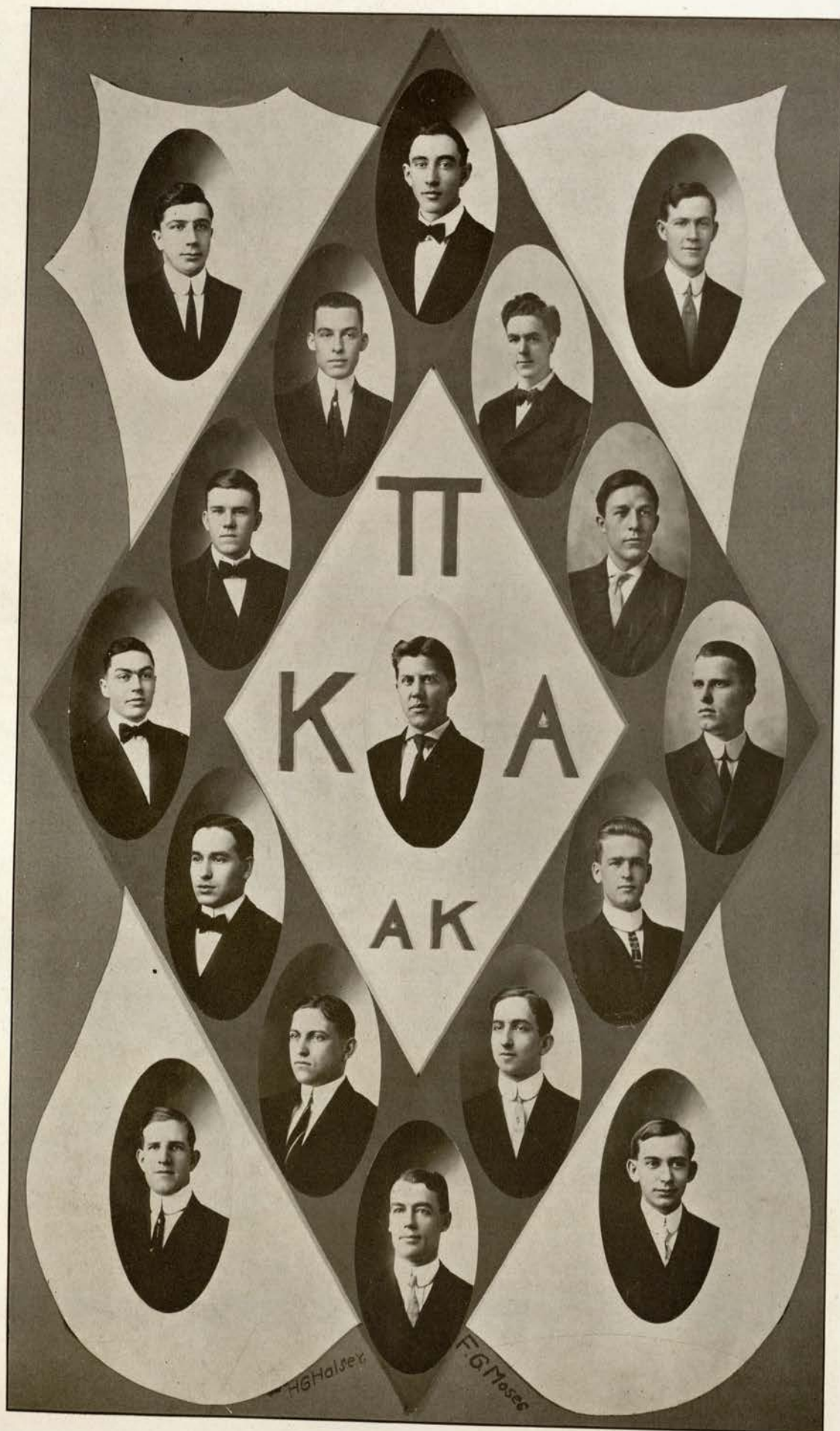
Colors: Garnet and Old Gold.

Flower: Lilly-of-the-Valley.

Publications: Shield and Diamond.

Dagger and Key.







Pi Kappa Alpha

Alpha Kappa Chapter

Frater in Facultate

HORACE THARP MANN

Seniors

OSCAR ALAN RANDOLPH
JAMES KELLER BEACH

ARTHUR GUSTAV PUDEWA
JAMES ALBERT TAGGART

Juniors

EUGENE HARDING BROUGHTON

DONALD HEWSON RADCLIFFE

WILLIAM RALPH KNAPPERBERGER

Sophomores

JAMES FLOYD DONALDSON
RAY GOULD KNICKERBOCKER

ENOCH RAY NEEDLES
JAMES PETER TIERNAN

Freshmen

FREDERICK GALLAWAY MOSES
HAROLD JELLEFFE HUBBARD

JOHN NORMAN SCHMIDT
HOWARD GOVE HALSEY

WILLIAM AUSTIN BOGEN







Tau Beta Pi

Founded 1885
Beta of Missouri
Established December, 1906

Frater in Urbe

VICTOR HARMON HUGHES

Fratres in Facultate

Honorary

LEWIS EMMANUEL YOUNG
AUSTIN LEE McRAE
GEORGE REINALD DEAN

LEON ELLIS GARRETT
DURWARD COPELAND
LOUIS AGASSIZ TEST

GUY HENRY COX

Active

VICTOR HUGO GOTTSCHALK

CARROL RALPH FORBES

HORACE THARP MANN

Fratres in Universitate

Seniors

TRUE WALTER BLAKE
OSCAR ALLAN RANDOLPH
ROBERT NATHANIEL COPELAND
HECTOR BOZA
RAYMOND ALEXANDER BINGHAM
HARRY WILLIAM LEE PORTH

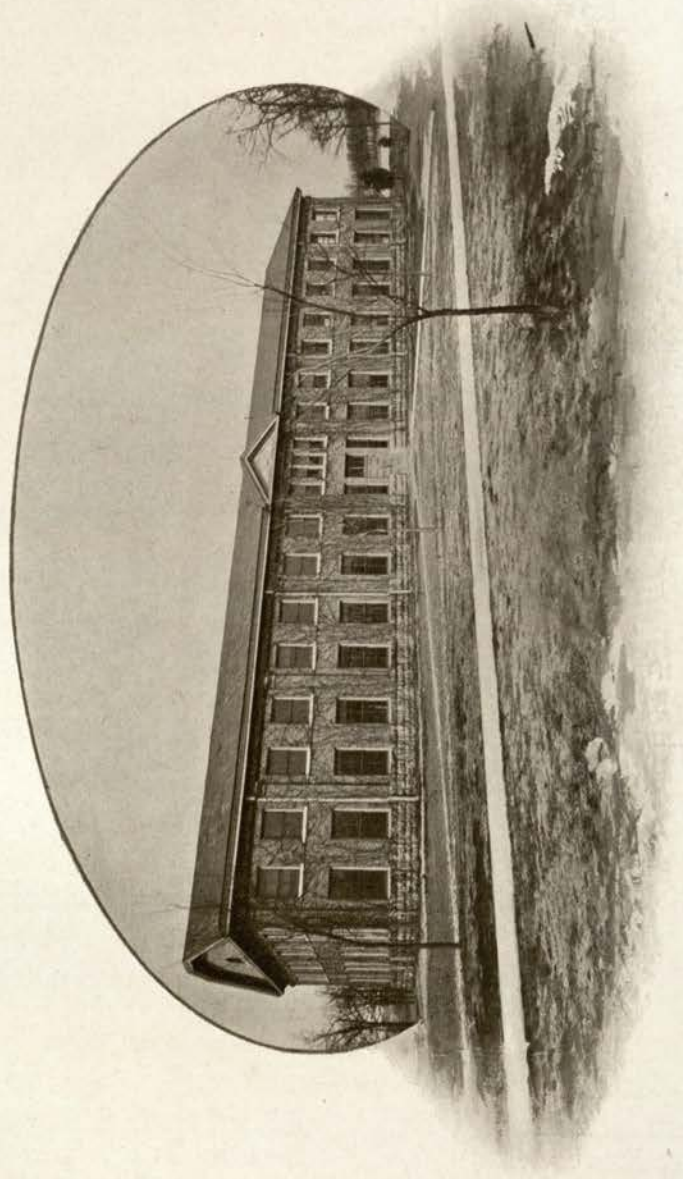
FRANK EDGAR TOWNSEND
ROBERT BRUCE MITCHELL
MAURICE MERTON ALBERTSON
ARTHUR GUSTAV PUDEWA
CHRISTIAN R. MILLER, JR.
JOHN ELMER SCHULTZ

Juniors

CAIRY C. CONOVER
JOSEPH STEWART IRWIN
ROSWELL HARE MAVEETY

EUGENE HARDING BROUGHTON
ARCH WAUGH NAYLOR
THOMAS ANDREW STROUP

HAROLD PERCY FORD



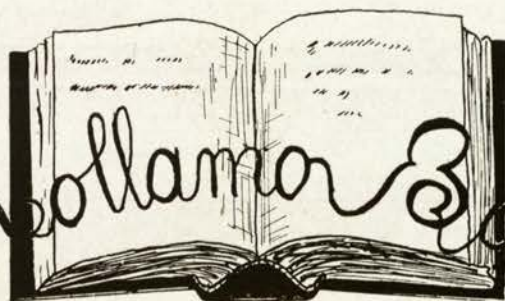
MECHANICAL HALL

BOOK V.

ORGANIZATIONS







The Rollama Board

L. L. Coover
Treasurer

J. H. Chase

F. J. Flynn

H. L. Tedrow
Ass't Manager

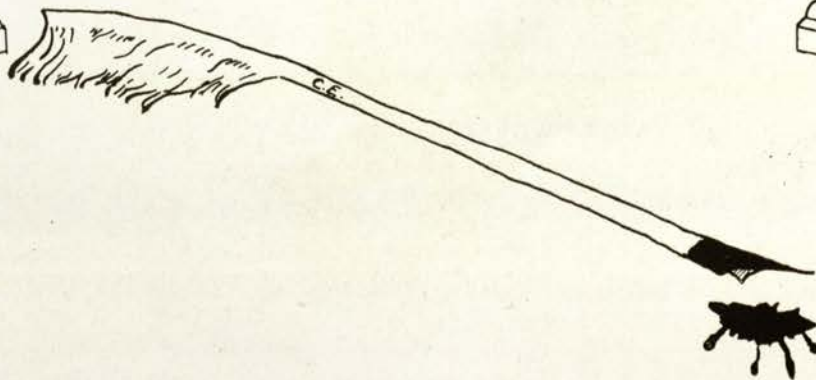
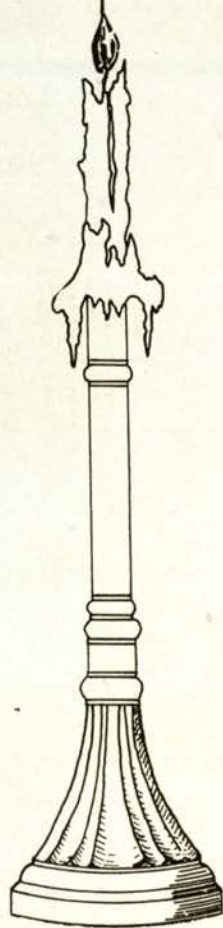
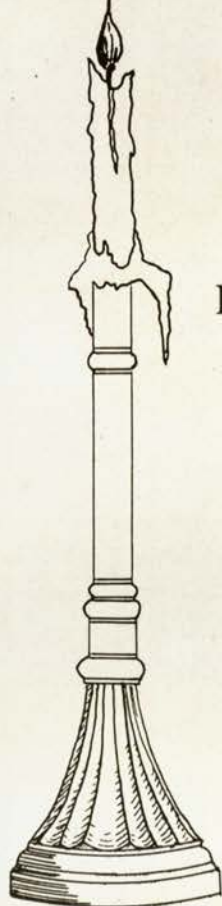
R. H. Maveety
Editor-in-Chief

R. B. Mitchell
Business Mgr.

O. A. Randolph

Will Porri

Carlos Elmore







The Student Council

Faculty Members

D. COPELAND, *Chairman*

A. L. McRAE
C. R. FORBES

F. E. DENNIE
G. H. COX

Seniors

S. C. MACOMBER
I. S. JAMES

D. L. FORRESTER
R. B. MITCHELL

Juniors

W. B. GRAY

W. PORRI

R. H. MAVEETY

Sophomores

E. R. NEEDLES

L. J. BOUCHER

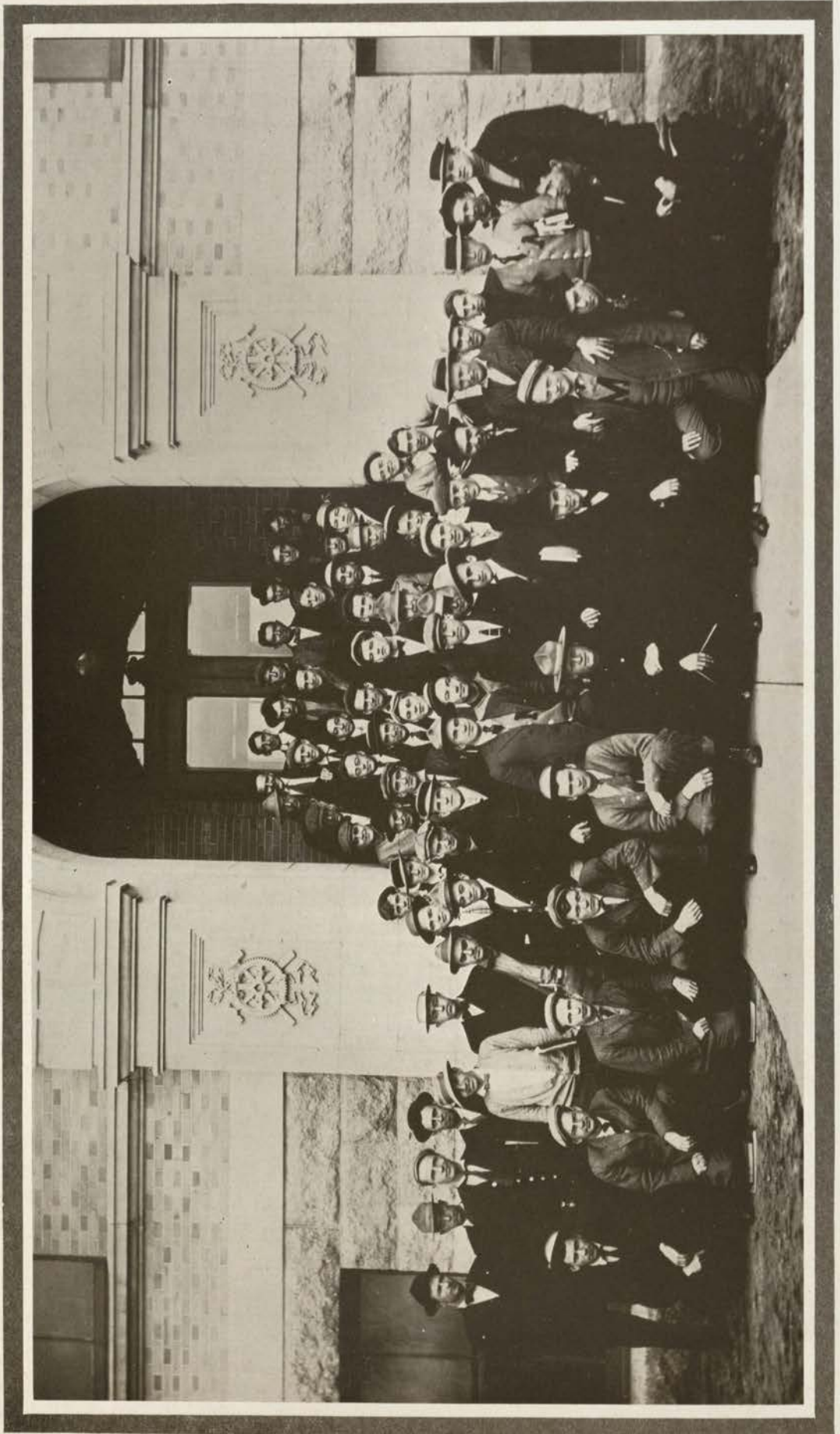
Freshman

L. R. BOWMAN

PUBLIC OPINION, it is admitted, has great weight in guiding the affairs of the nation. The student opinion is the public opinion of the school, and as such, should have power and weight in shaping the policies of the school. In accordance with this idea there has been instituted the Student Council. There are fifteen members in this body; the faculty having five representatives; the Senior class, four; the Junior class, three; the Sophomore class, two; and the Freshman class, one representative.

The activities of the Council during the past year have been varied, and, although it has accomplished nothing startling, it has, nevertheless, made a start in a good work. It has recommended to the faculty measures for student discipline. It has given assistance and advice to the school organizations, as the Athletic Association and the Rollamo Board. The Commencement Ball this year is to be held under the auspices of the Council. In every way this representative school body is striving to push forward the progress of the school, striving to put school life on a plane always higher.

The Council begs the aid of every one in helping it to be of greater use to the School of Mines. It will welcome suggestions as to things that it could do or things that it could encourage toward betterment of conditions. We will never be perfect, thanks be, but let us all try.





The Missouri Mining Association

D. L. FORRESTER	- - -	<i>President</i>
R. H. MAVEETY	- - -	<i>Vice-President</i>
J. S. IRWIN	- - -	<i>Secretary</i>
R. A. WAGSTAFF	- - -	<i>Treasurer</i>

N December, 1910, a meeting of the Juniors and Seniors of the Missouri School of Mines was held in Norwood Hall to discuss the possibility of forming an organization which should have for its object the consideration of subjects pertinent to the mining profession. A committee was appointed to draw up a constitution and by-laws, and at the next meeting the constitution and by-laws submitted by this committee were adopted.

The name adopted for the organization is "The Missouri Mining Association." The objects of the Association are: first, to advance the knowledge of mining among its members; second, to promote good-fellowship among the students and alumni of the Missouri School of Mines; and third, to bring the Missouri School of Mines into closer touch with the mining profession at large.

There are three classes of members in the Association—Active, Alumni, and Honorary. Any student of the Missouri School of Mines who has 125 credit hours is eligible to active membership. This requirement makes all Juniors and Seniors who have completed their Sophomore and Freshman work eligible. An active member becomes an alumni member upon graduation. Any alumnus of the School of Mines may become an alumni member, upon application, by a two-thirds majority of the vote of the active members present. Any one, who in the estimation of the Association, has been instrumental in advancing the science of mining may be elected to honorary membership by the Association.

Only active members may vote and hold office. The President must be a member of the Senior class, having 200 credit hours at the time of his election.

The regular time for meetings is on the evening of the first Tuesday of each calendar month. The programs for the meetings are arranged by a special committee. It is the intention of the committee to secure some one prominent in the mining profession to deliver an address at each meeting. Active members will be expected to take part in the programs and will be assigned subjects for talks or papers from time to time.

The Association, it is hoped, will be an efficient means of introducing the students of the Missouri School of Mines to the practical mining world. Also, it is to be expected that the Missouri Mining Association will be of material value to the mining profession at large; and, finally, it is to be another one of those connecting links between the alumni and their Alma Mater of which there can never be too many.





M. S. M. Orchestra

Director: L. S. COPELIN, *First Violin*

PAUL E. COASKE, *First Violin*

ROBERT MORRIS, *Clarinet*

R. B. MITCHELL, *First Cornet*

BLAINE EDWARDS, *Trombone*

PAUL LINDAU, *Bass Viol*

E. W. ENGLEMAN, *Piano*

WORTHY ROACH, *Trap Drums*



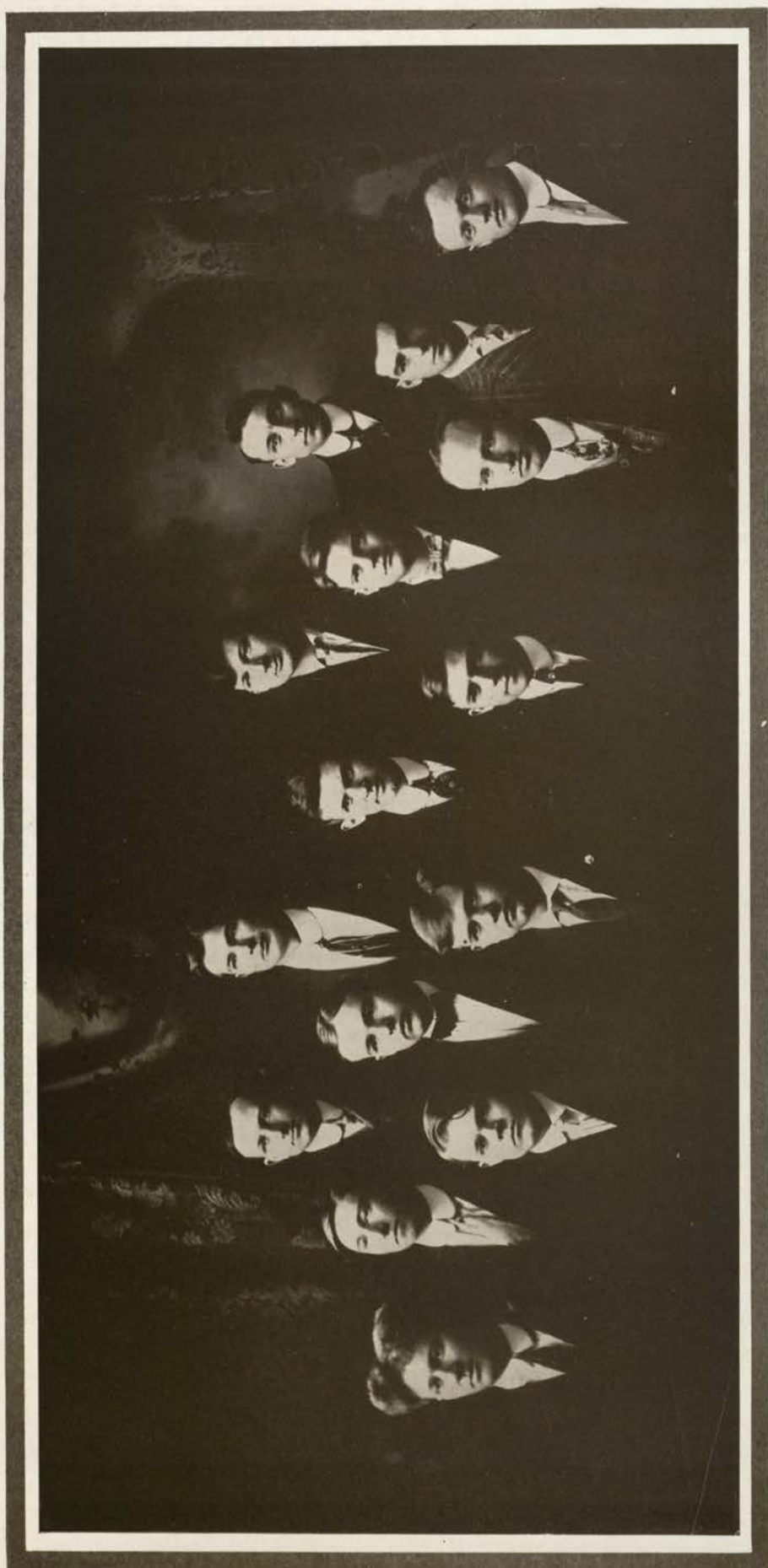
At the close of the last school year it looked as if the orchestra was going to be small this year, but you can never tell what the beginning of the school year will bring forth. This year brought few orchestra men, but it brought what we very much needed, a slide trombone player. By banding together some of the old bunch with the new men we got together perhaps the best orchestra in the school history.

The orchestra have confined most of their playing this year to dances. With a bunch of players that played together well, and with the new music, the dances were always a success. Besides the dances they furnished music for the smokers and the annual minstrel show. By the help of J. W. Scott, Clarke Shaw, Knapenberger, Professor Gottschalk, Professor Buerstatte, Mr. Kahlbaum and Professor Henniger, they did much to make the minstrel show a success.

This year ends the fourth year for the M. S. M. Orchestra. Of the old men, who formed the original bunch, only Mitchell is left. At the close of this year the orchestra will lose some more men, but there will remain some good musicians, and there is no reason why the orchestra next year will not be better than any of its predecessors.



"Gotty" at the Tyrolean Queen.





Grubstaker's Club

O. A. LUNAK, *Steward*

LEFT TO RIGHT

Top Row

H. F. ADAMS
W. F. BREWER

G. H. PRATT
O. A. LUNAK

Middle Row

L. V. LEASURE
W. H. ELBELT

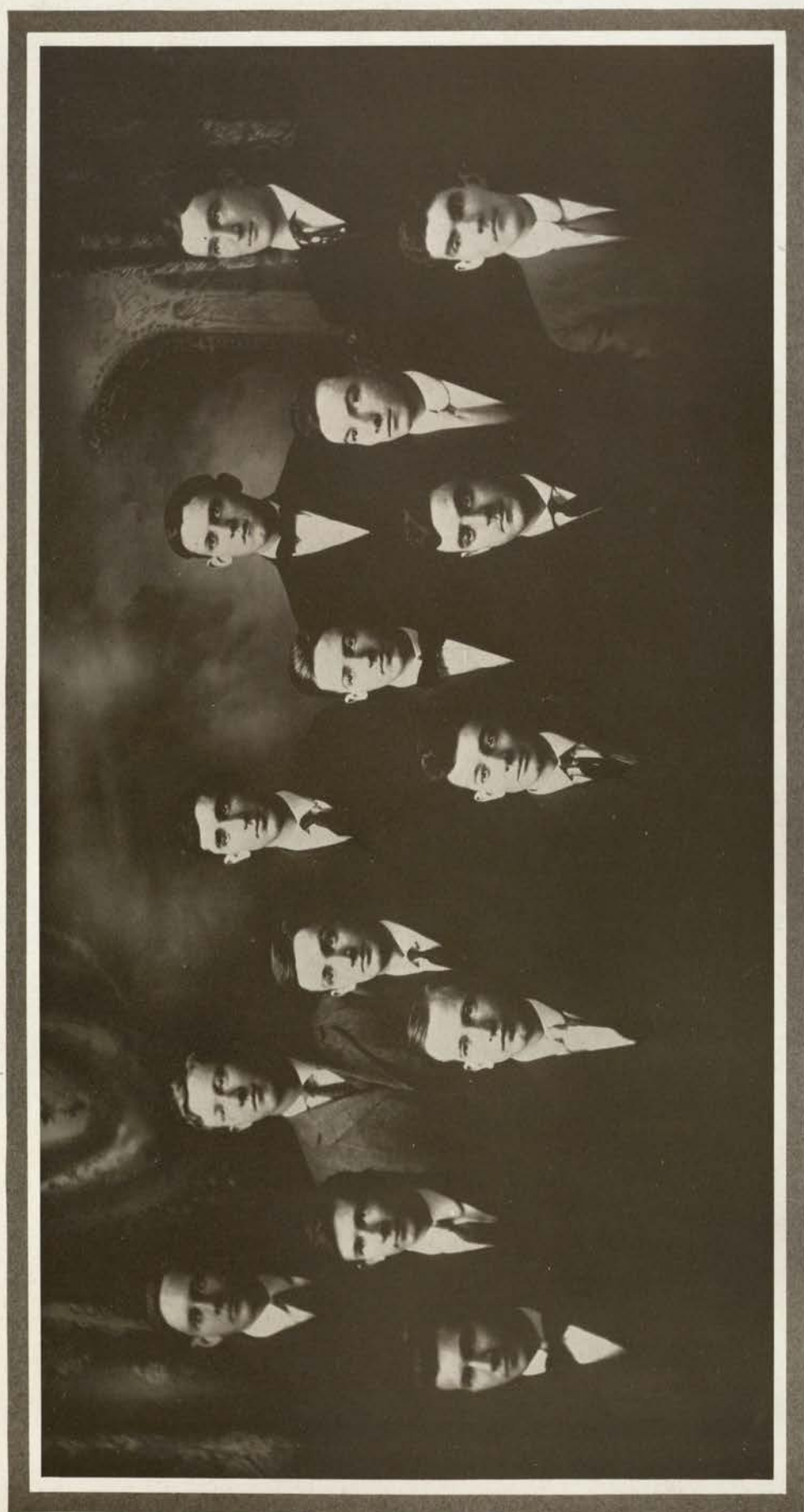
J. A. KURZ
E. C. WILSON

E. J. ALLEN

Bottom Row

L. C. NEWTON
R. G. SICKLY
A. F. KARTE

J. L. HASSETT
M. M. ALBERTSON
T. W. BLAKE





Lucky Strike Club

W. B. GRAY, *Steward*

LEFT TO RIGHT

Top Row

E. R. STANLEY
EARL HALLEY

G. E. ABERNATHY

M. H. DETWEILER
R. W. SUDHOFF

Middle Row

A. K. HAMMOND
R. H. MAVEETY

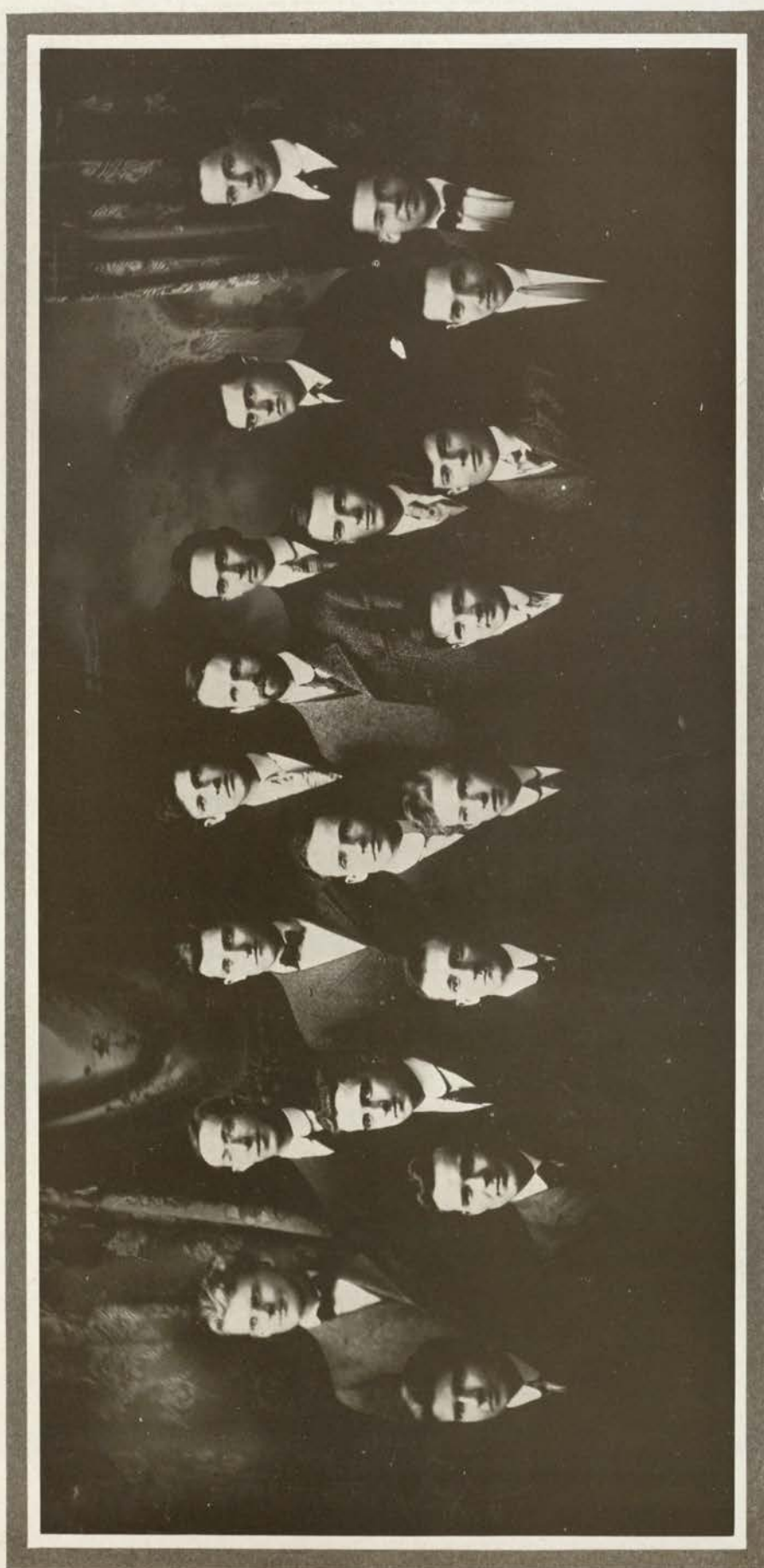
J. S. IRWIN
C. C. CONOVER

Bottom Row

O. N. BRIBACH
W. B. GRAY

E. R. MORRIS

A. H. CRONK
P. E. COASKE





R. Way Club

H. C. SHERRY, *Steward*

LEFT TO RIGHT

Front Row

M. J. KELLY

H. E. KOCH

F. E. TOWNSEND

H. N. CARLSON

S. R. HATCH

H. F. HUDSON

G. A. HELLSTRAND

Middle Row

L. B. PRINGLE

H. K. SHERRY

PAUL LINDAU

H. BARCLAY

Back Row

G. H. COWMAN

J. W. EGGLESTON

M. GABA

BLAINE EDWARDS

W. H. RICHARDS

DURWARD COPELAND

BLAKE GOSS

T. C. WILSON



The Young Men's Christian Association

Officers

F. E. TOWNSEND, *President*
E. LYNTON, *Treasurer*

J. C. BOYLE, *Vice-President*
L. V. LEASURE, *Secretary*

Members

E. J. ALLEN	C. C. CONOVER	M. J. KELLEY	V. H. McNUTT
R. A. BINGHAM	M. H. DETWEILER	H. E. KOCH	H. H. NOWLAN
L. J. BOUCHER	J. F. DONALDSON	J. A. KURZ	SHIV RAJ
L. R. BOWMAN	H. P. FORD	L. V. LEASURE	WORTHY ROACH
J. C. BOYLE	H. G. HALSEY	L. L. LODWICK	R. G. SICKLY
W. F. BREWER	S. R. HATCH	E. LYNTON	C. O. SMITH
H. I. BROOKS	C. W. HOLMES	H. T. MARSHALL	T. A. STROUP
C. Y. CLAYTON	L. E. HOLLISTER	R. H. MAVEETY	



HE Young Men's Christian Association has been very successful this year and has been of great assistance to the school in many ways. The Association has held meetings every week in its rooms in the Mining Building and the members have derived great benefit from these meetings. Many pleasant evenings have been spent there.

The Lyceum Course, given under the auspices of the Young Men's Christian Association, has proved a greater success than ever before. The course consisted of the best talent obtainable, enough of variety being introduced to make it more popular. Every number was well attended, and all who came were well pleased with the course. As good a course is promised for next year, presenting the best talent obtainable in more numbers than ever before.

During the first week of school the Young Men's Christian Association rendered valuable assistance to the new students in placing them in desirable quarters and helping them to get acquainted with their surroundings and associates.

The Association has enjoyed a very successful year, and expects to continue to gain in strength and helpfulness to the School in the coming year as it has during the year just passed.

BOOK VI.
HAPPENINGS





The Colorado Junior Trip



WHAT HO! for the Golden West! We were twenty strong when we arrived in Denver on Saturday, June the fourth, and had great expectations of what we were to see on the Colorado trip, that is required as a part of our college curriculum.

We celebrated in various ways the fact that we were in a good, live, place again, not a few fellows making the Hofbrau their headquarters "with a stein on the table and a good song ringing clear." Oh, you blissful memories of this city where mushrooms cost eight and one-half cents a piece and the barbers condescend to shave one for the modest sum of one dollar. This was the first of the trip and money was flowing as freely as the Arcade tap beer does when exams are over.

The next day we left for Idaho Springs, the beauties of the Clear Creek scenery being marred only by Burdick's wise remarks and poor guesses as to the elevations of the various points along the road (especially the large "M" at Golden, which he only missed about 800 feet).

Monday morning the bunch reported at the Club Hotel and were divided into two squads, one squad doing the surveying part first and the other the geology and mill work. The squad of us who were detailed to do the surveying first had to adjust the instruments before we could begin work, and it seemed to take us an unnecessarily long time because we were anxious to get into the real mountains and do some actual mine-surveying; but, after monkeying an hour or so with our top telescopes, we walked some two and a half miles up to the Morning Star mine (Prof. Copeland's route preferred). We then drew a long breath and started in to learn mine-surveying along with the manly art of cussing as taught by Prof. Forbes, when he finds Burdick using a small board with a nail in it so he could set up the instrument and then move the point under it. (Woe seems to come to a Senior who changes the fundamental rules of surveying). Again there was much speculation as to how we could tie Jimmie Beach in the shaft, but he surprised the boys by climbing the ladder as gracefully as he glided over the dance floor with Marguerite of the boarding house.

The evenings around Idaho Springs were spent in drawing up our map, swimming, talking to the Golden and Ames students, who were in town the same time we were, etc. (Mostly etc.)

Some of us walked over to Central City, and the principal thing that we got on this trip was exercise. We also followed Cox over the mountains around Idaho Springs. The climb and the run down the long slide are things that we will not soon forget. It was on this trip that Hungry startled Coxie by figuring the strike of an outcrop of granite to be N 98°W, and we learned more about Geology and Lithology than we ever before thought existed. Cox got tired out, so in the afternoon Copeland took us over to the Newton Mill and even the Count quit asking foolish questions here. We all looked knowing but said little until Cope came around and put us wise to what they were trying to do,



- Central City -



- Morning Star Mine -



- Al Breckenridge -



- At the Summit of the Pass -



- Roosevelt Tunnel -



- Royal Gorge -



- Utah Copper Company -

and then to our disgust we found that a classifier, which Dudley had talked to us half a term about, was only a box stuck in some out-of-the-way place in the mill.

The next day we were initiated into the wonders of the Newhouse tunnel and were hoisted up through the Gem shaft to daylight. Here we ate our lunch, consisting principally of "blank" sandwiches, and tried to promote the Boza-Wander fight, but had no luck, so we trusted to our legs once more and followed a U. S. G. S. man and a State Geologist back over the mountains. We learned that all Geologists like to talk, that the number of dykes bears a direct relation to the number of pine trees in the locality, that Geologists agree to disagree, and that a rock which isn't anything else is a porphyry. Finally, the Big Guns found that they couldn't walk us to death, so they pointed out a trail that led to Virginia Canyon and when we got there, Allen knew the way home. He had been there before.

The next morning we walked to Floyd Hill to see a fault and, on the way back, visited the Seaton Mountain Electric Company's power station and a placer mine. In the afternoon we made flow-sheets of the Hudson and Jackson mills. That day the Case boys arrived and went geologizing with their low-cut shoes and white collars; in the evening one could hear them almost a quarter of a block away giving nine rousing (?) cheers for their Alma Mater. O you kids!

Monday morning we visited the Little Mattie Mine and mill, but to our great disappointment, they wouldn't let us ride in the buckets on the aerial tramway. As soon as we were hoisted out of the shaft, the bunch made a record-breaking hike to the boarding house for dinner, with Pude and Raj in the lead and almost flying. That afternoon we were supposed to finish our mine surveying maps.

The next morning Raj took Red's, Otto's and Randy's pictures with the K. M.'s, and then, with a feeling of regret, we left the place where we had spent such a pleasant week. No delay at Silver Plume. The Argentine Central train was ready to pull out so we started another ascent, and after going through the "city of 10,000 pine trees" and passing "the rock that rocks", we arrived at Waldorf, where everybody who had a girl sent her a postal. Burdick and the Count started out as the advance guard and were lost in a snow storm on Argentine Pass, but got to the buggies ahead of the rest of us, who had to wait while Cox gave us a lecture on cirques and whatnot. Lunak climbed as if he had been brought up in the mountains. We drove to Montezuma and beat the town base ball team by a score of 9 to 4. Our battery was Dosie and Blake, while Pude starred (?) in left field and Prof. Copeland got four hits out of four times up. Cox got his nose skinned while visiting a mine that night and "thereby hangs a tale".

At six bells in the morning, we drove out of Montezuma singing "Has Anybody Here Seen Kelly" and we were glad to get away from this place where beer is fifteen cents a glass and cigars the same price per. Raj investigated these prices. It was a long ride to Valdora, but puns by Chase, Cope and Old Faithful served to relieve the monotony of it. We saw some great gold dredges at Valdora and were treated to a royal dinner by Mr. Lohman, a former M. S. M. man.

Then came the rainy ride to Leadville, where we visited the A. V. smelter and the Yak mill the day after we arrived, incidently taking Faithful and Raj down Fourth Street where Jim Beach paid three bones for a bottle of the amber beverage, while Porth and Hungry performed on the piano. The next day we were shot through the Yak tunnel and up the Johnny shaft, got a square meal and McFadden got the Count's goat, so Cox had to do all the lecturing on the walk back to Leadville. That night we went en masse to all the moving picture shows in town—we had to go in a bunch, or they would have pulled us in as tramps.

When we left for Denver, Hungry decided that Raj was not a success as a valet so he sold him to Pude for a one cent stamp. The day was spent reading dime novels and looking for pot holes. That night we visited the now familiar Denver scenes and then left for Colorado Springs, where some of the fellows copped some "fluzies" at the band concert. We visited the Garden of the Gods and saw two pretty girls on horseback with whom our Profs. tried to make a hit. Even Diaz did some good walking this day. We went to the Golden Circle mill in the afternoon and Pude nearly did some high-grading. Allen carried his camera on all these trips, but never took any pictures.

We followed Cox the next morning and would have been walking yet if we hadn't stumbled onto a car line. Red Blake tore his khakies but didn't get embarrassed. We went to the Portland mill in the afternoon and then left for Victor. Faithful, our exponent of pure English, said "It was he" and got dubbed "Old He Townsend" for it. We met Pierce, Baumbach, Kenniston and Jimmie Long when we got off the train at Victor. The Super. at the Elkton beat it when he saw what a bunch of rough-necks we were, so we went to the Portland mine and saw Baummy in his digging clothes. Diaz called our attention to the fact (?) that the shaft here was more than vertical.

Our crowd walked from Cripple Creek to the Roosevelt tunnel with Cy Young in the lead and spent the next day wandring through it. Hungry and Dosie were winners in a series of quoits games. Boza said that he liked the game but couldn't "sabe" it. Next day we were dropped down Independence shaft and were told how the roof was likely to cave in on us at any minute, but got out safe, to tell Jimmie Chase about the fast ride that he missed after looking forward to it for two weeks.

We left Allen and Pickering at Victor and arrived in Pueblo in bunches of three and four, hit the free lunches and then went to see how they make iron and steel at the Colorado Fuel and Iron Works. In the afternoon some of the fellows went back through Rolla and the rest went on to take the Salt Lake trip.

With many regrets that the entire crowd was not going to Utah, the few that were going headed by Professor Copeland, started on the long journey. One incident did much to relieve the monotony of the trip. At Salida, Count left the train and entered the station restaurant to fill up on sandwiches. While engaged in this delicate task, the train pulled out, much to Count's dismay and our huge delight. Although we had several hundred yards handicap, Count pursued and for some time odds were even that he would overtake the fast moving train. But the load of grub that he carried was too big a hindrance and after chasing us half way across Colorado, he gave up in despair. At last we thought that we were rid of him, but he overtook us on another train about



- Garden of the Gods -



- At Central City -



- Georgetown Loop -



- Utah Copper Company -



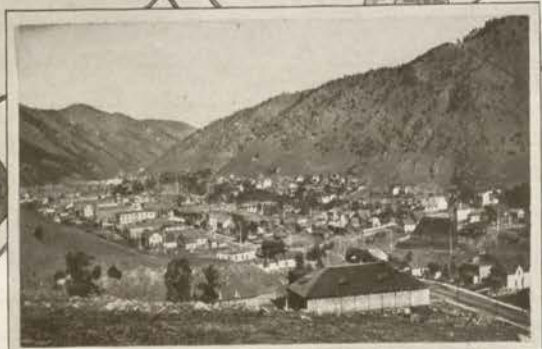
- Forbes & Cox -



- Garden of the Gods -



- Morning Star Mine -

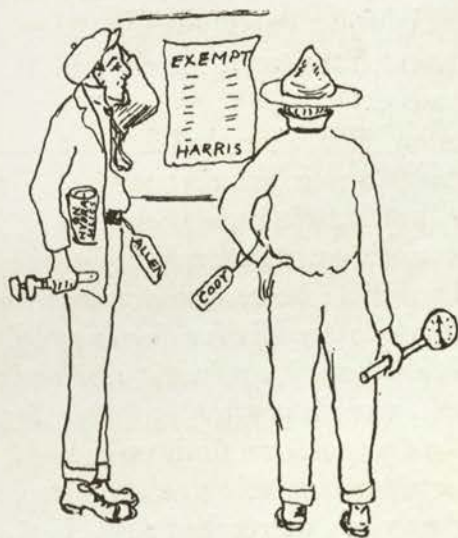


- Idaho Springs -

midnight and made his presence known by awaking us and telling us of his adventures.

Arriving in Salt Lake Sunday, there was nothing to do but to go to Salt Air, and this we did. Monday found us in Bingham where we visited the property of the Utah Copper Co. and where "Cy" Young discovered that Chase had deserted and left for parts unknown. Tuesday we visited Garfield and saw the mills and smelter there. Glad that the trip was over, and yet sorry to part from such good fellows, we returned to Salt Lake and disbanded.

And now that the trip is but a memory of the jolly month, spent by twenty jolly fellows of the jolly class of 1911, let us read over this brief summary of the good times we spent together during this month, let us laugh with the rest at the incongruous positions in which we may have been placed; and let this fragmentary record recall to our minds the things we learned, the sights we witnessed and the impressions we received while we were traveling together in the pursuit of further knowledge along the lines of our chosen profession.



And then they did not make it



The Missouri Trip



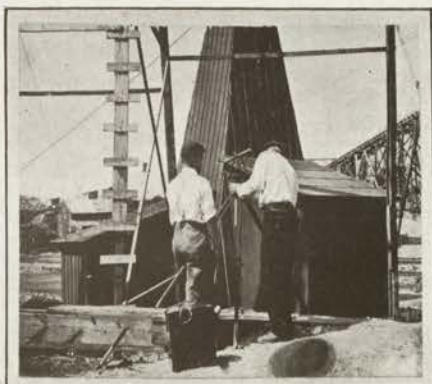
THURSDAY, June 2nd. We met at the Union Depot at one o'clock and with Professor Griswold in the lead, advanced upon the bluffs along the river. The bluffs of the river being the stronger, most of us laid down while Jo Jo tried his bluff, which worked. Then we looked over the loess deposits and inspected the quarries. Then back to the city. "Meet me at eight o'clock tomorrow morning for Vineland," so said Jo Jo. Those were the last words we heard from Professor Griswold. Where he went or what he did, we did not care. All we knew was that we had left Rolla and everything of a serious nature behind us. We had spent the last six months in Rolla and St. Louis seemed a wonderland, so we began to explore.

Friday, June 3rd. Reached Vineland about noon. Vineland is a great place, two houses, one store, the depot, and stacks of barite. Farrar contracted for dinner, which was the best thing we got in Vineland, probably because we were very hungry. Then we went to look for the Geology. Some of us looked over the tunnel, and some looked through, but most of us recognized some faults when they were pointed out to us. Then Professor Griswold handed a piece of barite to Branham who entertained us for the next hour and a half by telling what the said piece of barite was not, what it could be, and why it was not what it was. Branham certainly has one fine line. Then Connelly started to talk and the rest of us ran to catch the train. Arrived in Arcadia at six P. M. Time for dinner and then to bed.

Saturday, June 4th. Had an early breakfast, during which Boland complained of not being able to sleep on account of the street cars. For further description of Arcadia, see Longfellow's poems. We took in Elephant Rocks in the morning and various quarries around Graniteville. Then after lunch we went over to Shephard Mt. More Geology, more entertaining by Branham, and lots of walking. Back to Arcadia for dinner and then sweet sleep.

Monday, June 6th. Started out bright and early for Pilot Knob, which we all remembered from our history by the battle fought there. All day we faithfully followed Jo Jo up and down until we thought we had seen everything, but then Jo Jo had forgotten something near the top, so back again we went. Never were we so glad as when we reached Arcadia at night.

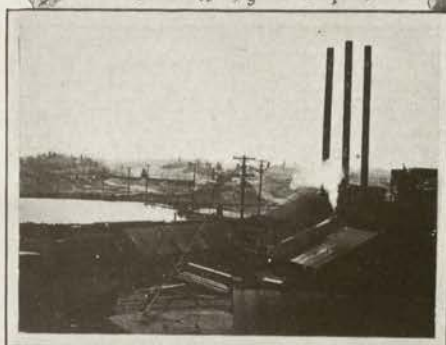
Tuesday, June 7th. Packed our suit cases and went to Ironton where we went up on Iron Mountain and cussed and discussed Geology and things in general. Back to Ironton to catch a train for Bismark. Boland and Thompson walked to Bismark, six miles away. The rest of us rode to Bismark and passed Boland and Thompson at the yard limits, pretty good time (for Boland and Tommy). Arrived in Bismark, changed cars for Flat River. Professor Griswold left us here and we met Professor Dudley in Flat River. Half the bunch started to walk to Flat River, ten miles away, Birdie and Tommy in the lead. The other half were sensible and agreed to wait for the train. Arrived in Flat River at seven o'clock. We were "all in" and went to bed.



- Surveying at Joplin -



- Shut In -



- Joplin District -



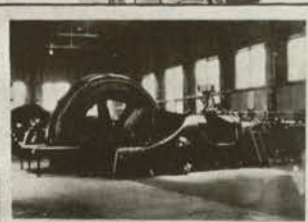
- Summit of Pilot Knob -



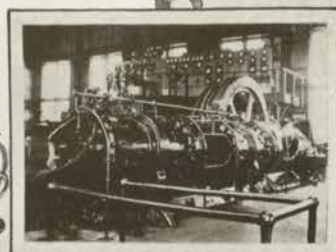
- Iron Furnace - Pilot Knob -



- Shut In -



- Old Workings at Iron Mt. -



- Doe Run Power Plant
Flat River Mo. -



- The Sermon on the Mountain -

Wednesday, June 8th. Met on the Federal Hill and went underground. Birdie and Tommy gave exhibitions of mucking. In the afternoon we went to the Federal Mill. Then back to the hotel. In the evening we took in the picture shows, from which Boland evolved a moral—never again.

Thursday, June 9th. In the morning we took in the Doe Run power plant and mine and in the afternoon went through their mill.

Friday, June 10th. Went out to the National mill in the morning and to the Des Lodge mill in the afternoon. To the picture shows at night. Boland again evolves a moral—never again.

Saturday, June 11th. Branham and Connelly leave the faithful and go to St. Louis. The rest of us go to Leadwood and spent a miserable day. Dudley realized how badly he had treated the bunch and so bought ice cream for us. We left Leadwood and go to St. Louis and then to Rolla.

Monday, June 13th. Arrived in Joplin about ten o'clock. Dudley goes out to look for something for us to see and we see the town. Good for "Dud".

Tuesday, June 14th. Look at some hand-jigs at Dunawig and then looked at a silicate mine.

Wednesday, June 15th. Went out to Woodbury mill in the morning and in the afternoon to the Oronogo circle.

Thursday, June 16th. Took in some more mills in the morning. Then went out and saw the Faust jigs in operation in the afternoon.

Friday, June 17th. Jo Jo arrives, cheers from the mob, and all is well. Went out to Dunawig, spent the morning on the top. In the afternoon went underground and studied pocket formation. Also took in the Lincoln mine and the Continental. Farrar pinches the cable in two with his hands but all are saved by Boland who stops the can with his feet. Birdie gets a leather medal, the life-long thanks of the occupants of the can, and also the ground boss who was standing in the shaft at the time owes his life to Birdie for this.

Saturday, June 18th. Went to the Coahilo mine in the morning. Had dinner at Webb City, and in the afternoon went out to the Oronogo circle.

Sunday, June 19th. Went out to Spring Creek and saw the Daw and power plant.

Monday, June 20th. Went out to Atwood in the morning and in the afternoon went to the Herald mine. Here Professor Griswold left us and everyone of the fellows regretted his leaving, for no matter what he did in the class room, he won the friendship of every fellow on the trip. He was with us all day "talking shop" but did not mention it once during the evenings. The evenings were even more pleasant than the days for then instead of being Professor and students it was just plain fellows. His Bostonian shell was broken and he was ever ready to throw his lot for the evening's amusement with that of the bunch, and we were certainly glad to have him. It was with deep regret that we realized that most of us would never see him again.

Tuesday, June 21st. Professor Harris appeared and we went out to the Yellow Dog mine for the Mine Surveying.

We continued the surveying Wednesday, Thursday, Friday, and Saturday, up to noon, when we left Joplin, with our trip over. The trip was a huge success from every standpoint, and the people we met treated us royally.



The Miners' Minstrel Show



PROFESSOR HENNIGER, Director



HE two performances of the Miners' Minstrel Show were given at Mechanical Hall on the evenings of February twenty-third and twenty-fourth. It was as great a success as ever. A large audience filled the hall both nights and were well pleased with the show.

As usual, the show started with an overture by the entire company. It was catchy, and made a good starter for the fun that followed. And what followed was certainly fun. The jokes were passed back and forth between the ends until "Tommy" got up to put on his song. "Please Come Back to Me" made a hit, and the way "Tommy" sang beggars description.

More jokes were passed around to the various celebrities before Seward

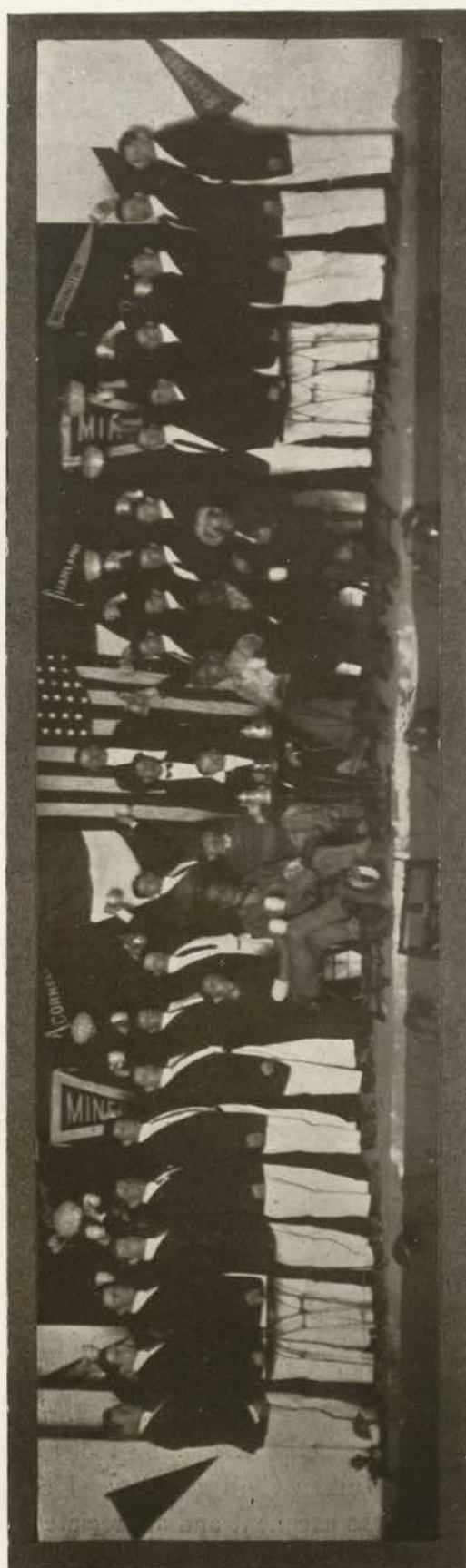
sang "The Vale of Dreams." His clear tenor voice pleased everyone. Then Tedrow, as funny as ever, only more so, sang (?) "You'se Gwine to Get Somethin' What You Don't Expect." His song was certainly better than any of us expected, even from him. All we can say is that it was sung as Tedrow alone could sing it; that is, funnier and better than any one else could have sung it.

After more jokes on the part of the ends, Irwin sang "Killarney and You." Of the solo work Irwin's was the best. His voice was clear and strong. Too much in praise can not be said of it.

Flynn's "Constantly" was one of the best songs of the show. The effect was somewhat spoiled by the lights going out, but, nevertheless, it scored a hit. The parody on our young mathematics professor was appreciated by all except by that said professor.

Then came more jokes as some of the members of the faculty will doubtless recall. "Hungry" sang "You'll Come Back" as the closing number of the first part of the show. He was the same old "Hungry" of former shows, and accompanied his song with appropriate body swings and foot movements.

Sprague then put on his Indian Club specialty. He certainly knew how to handle the clubs. His work was excellent and appreciated by all. The graceful way in which he went through the various drills in the colored lights which played upon him made this one of the prettiest acts in the show. The mandolin club played several selections, with solos by Pratt and Pringle. Pratt is surely an



MINSTREL SHOW TROUPE

artist on the guitar, and his songs formed one of the best stunts of the show. Pringle also did well and received several encores.

Carl Hamm entertained the crowd with a monologue. Hamm was the funniest man in the whole show. We will not attempt a description here. If you didn't see it, we can't make you understand how good it was. If you did see it, you can never forget it and so we won't have to recall it to your mind here.

The Casey Jones specialty which followed scored one of the big hits of the evening. Casey Jones and his quartette, Thomas, Paulette, Nowlan and Seward, put on some fine parodies and jokes. The stage setting was superb from the almost hand car to the nearly semaphore. It was applauded again and again.

The curtain then rose on the closing scene. The entire company were on the stage, which resembled a summer garden. "Hungry" sang "Sweet Italian Love" and scored a hit in it as he always does. The circle then took up the song and varied it through the finale. It was a suitable close to the show and was well sung.

The second night was considerably changed from the first night. After the opening overture, "Tommy" sang "Please Come Back to Me." It scored the same hit that it did on the first night. "Tommy" is certainly a second Tedrow in the bud.

After the intervening jokes, Enoch sang "Love Dreams" in a way that could not have been improved upon. He made a hit, especially with a certain member of the "Younger Set." Next Paulette sang "I'll Lend You Anything I've Got Except My Wife." He was good. Everybody liked "Bob's" song and the way he sang it. Irwin sang "Killarney and You" in as pleasing a manner as he did on the previous night. The jokes were passed around, as on the first night, between each song. "Red" can tell you more about the jokes than we can.

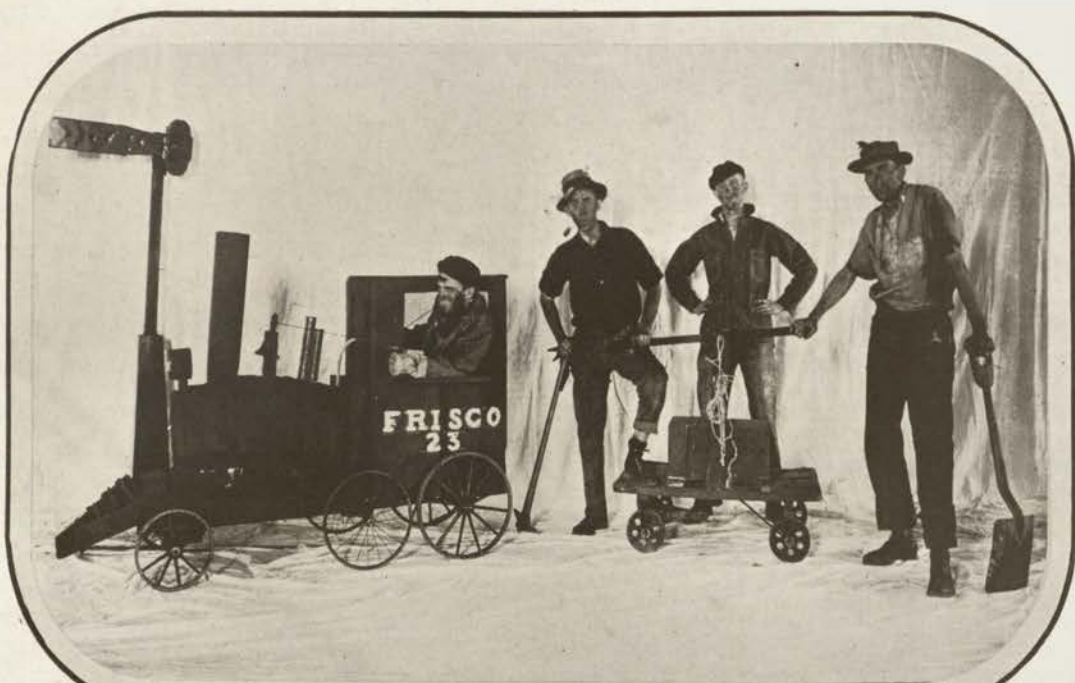
Then Nowlan sang "If I Could See as Far Ahead As I Can See Behind." He made the big hit of the second night. Like "Hungry," he added to the song appropriate steps and gestures. Nowlan received encore after encore. "Hungry" brought the first part of the show to an end with a parody on "You'll Come Back." It made a great hit with everybody except "Red."

The mandolin club played some selections as on the first night, and Pratt and Pringle rendered several solos, both men making a very good impression. Hamm put on a new monologue. He had some difficulty in remembering all of it, but he stuck to his post until he won out.

Casey Jones took possession of our attention next, and with new parodies and jokes kept us in an uproar of laughter during the whole of the specialty. Casey, his engine, and his crew certainly were there with the goods.

Our old favorites, Tedrow and Flynn, put on "A Few Minutes With Some Dead Ones," as the program proclaimed it. To describe this stunt would require a more capable pen than mine. It was simply great. The whole act, from "Pegasus with the Snaky Locks," to "He was a Soldier, Too," was the best stunt we have ever seen.

The grand finale was the same as on the previous evening. It brought the show to a fitting close.



MINSTREL SHOW STUNTS

The Rollamo Board takes this opportunity to thank the members of the circle and orchestra for their untiring efforts throughout the six weeks of practice for the show. They all did their best to make the show a success, and as to how well they succeeded we will let you judge.

The six ends also deserve more thanks than we will ever be able to give them. They are the ones upon whom the major burden of the show fell. Especially are we indebted to Tedrow, Flynn, and Engleman for their work and general superintendence of the show. For three years, ever since it started, these three men have pushed the minstrel show with all that was in them. Each year they have sacrificed all their time for the betterment of the show. They will not be with us next year, and the school and the Rollamo will lose three of their best friends. Such spirit as these men have shown makes college life worth living. It is a spirit that we all should emulate.

Messrs. Elbelt, Newell, Gleason, Conover, Boucher, Owen, and Dickerson all deserve special mention as having done very much for the show. They all gave freely of their time and energy, and we are obligated to them in no small way.

In closing, we wish to express our sincere thanks to Mr. Henniger, of the School of Music. He was with us from the first practice to the end of the show. Without his aid the show could never have been given. We owe him a debt of gratitude that we will never be able to repay.

Personnel

Interlocuter

E. R. NEEDLES

End Men

BONES

T. R. THOMAS
R. J. PAULETTE
H. H. NOLAN

TAMBOS

E. W. ENGLEMAN
H. L. TEDROW
F. J. FLYNN

Chorus

BARCLAY, H. W.
BLAKE, T. W.
CODY, B. H.
CUMMINGS, L. M.
CROTEAU, L. J.
CRUTCHER, E.
FAHRENDORF, P. M.
FOGARTY, E. A.
HALSEY, H. G.
HAMM, C.
HARRIS, D.
HOLLISTER, S. E.

HUBBARD, H. J.
HAMMOND, A. K.
IRWIN, J. S.
LEASURE, L. V.
LYNTON, E. D.
MAVEETY, R. H.
MOSES, F. G.
MURPHY, J. A.
SEWARD, J. F.
SHERRY, H. K.
NEWELL, J. C.
WEBSTER, J. N.

WILSON, T. C.

M. S. M. Mandolin Club

B. H. CODY, Leader

F. W. CODY
H. M. KATZ
T. R. THOMAS

J. C. NEWELL
L. R. PRINGLE
G. H. PRATT

F. J. FLYNN



Green Cap Day



SEPTEMBER of 1910 brought one of the smallest Freshman classes to school that M. S. M. has had in years. But what they lacked in numbers they more than made up for in spirit and in the preliminary skirmishes of the first week of school they gave as much as they received, as some of the luckless Sophomores who fell into their hands can testify.

After a week of constant warfare filled with many exciting experiences for the new men, the Sophomores posted their proclamations, laying down rules for the Freshmen to follow and setting September 19 as the day for the annual class scrap, to settle beyond dispute which class was better. The Freshmen had no time to prepare a written answer, and instead, waited quietly for the coming of that eventful day when they should either conquer or submit to the upper classmen's orders.

Following the precedent set by the two preceding classes, the Freshmen took to the woods, both literally and figuratively, on the Sunday afternoon before the day set for the fight. Several miles from town they made camp. Few Freshmen will ever forget that night spent at Panther's Bluff. All went well until the darkness came, but with the darkness came the cold. Some of the Freshmen had burned all the wood that had been collected in one big "bonfire" while they celebrated an "Apache War Dance". Soon this festivity was over, as was also the fire. The darkness being rather intense and the Freshmen unaccustomed to their surroundings, no more wood could be collected.

The Freshmen then invaded a hayfield and deducted enough hay to feed a regiment of cavalry. They buried themselves in this fodder, but the cold still penetrated to the marrow. "Apache Dances" were tried, led by the tallest and the shortest men of the class, but they were cold and remained so. Worse than the cold was the lack of sufficient eats. Like Freshmen, they had devoured everything upon arrival at the Bluffs, and every minute they got hungrier. One Freshman who had been wandering about in a vain endeavor to keep warm, fortunately stumbled upon a watermelon patch. For the rest of the night, or rather for the rest of the morning, they filled themselves with watermelons. As a result of this not very nutritious diet and the spending of a sleepless night, the Freshmen had great difficulty in dragging their weary legs toward the city of Rolla in the morning. By dint of a good deal of self-encouragement they finally managed to reach the town.

The Sophs, who had planned to take their enemies unawares on Sunday afternoon, found that their victims had gone, and after thoroughly searching the town and immediate vicinity, gave up their plan of surprising the Freshmen and waited impatiently, and withal, a little nervously, for the coming of the next day.

At the top of the hill just outside of town, the Freshmen procured a bucket of hot coffee which put them in much better trim for the contest. So without any defiant cheers or yells to herald their coming, but marching silently and



Freshmen



Reception



September 19,
- 1910 -



determinedly, they approached the campus and took their stand at the lower end of the quadrangle, facing Chemical Hall. Everything was in readiness for them when they reached the campus. The Sophomores, armed with ropes, were at the north end of the quadrangle, and a goodly number of spectators were on hand to witness the conflict.

At the signal the fight started, and for some minutes the result hung in the balance. But confidence, born of other fights, stood the Sophs in good stead, and one by one the Freshmen succumbed and were securely bound. For twenty minutes the two classes combatted with each other, but eventually even the most stalwart of the Freshmen were overpowered and the whole class was lined up to be decorated.

Artistic coats of green paint were administered, placards were hung about the necks of the more talented members of the class, telling of the accomplishments of the wearers, and the entire line was led to Jackling Field where the crowd gathered to see the fun.

A good program had been arranged and it was carried out, after a little persuasion, to the huge enjoyment of the crowd. A molasses fight, songs by "Caruso" Kayser, "rooster fights," bobbing for pennies in a pan of flour, and blanket tossing, were the principal features of the entertainment.

At the conclusion of these events, the Freshmen were placed in line and marched through the town, the parade ending up at Heller's, where the green caps were purchased by the Freshmen. Thus ended the hazing for 1910.

The Sophomores achieved their one ambition, to win without the aid of the upper classmen, in spite of their small numbers, while the class of 1914 won undying fame by the gallant resistance they made. May all the class rushes in the future be as hotly and as fairly contested as the rush of September, 1910.

A Barrel of Hamm

Though this imported Freshman looked as gentle as a lamb,
He claimed that for the Sophs' rules he didn't give a damb,
But the Sophs awaited their chance,
Caught him, and took off his pants,
And put him in a barrel and they cured the small Dutch Hamm.



The Freshman Smoker



On the evening of November 5th the Freshmen took their turn at entertaining. The high quality of the two preceding smokers made the pace rather hard for the new men, but they were equal to the occasion, and made the evening one of continuous pleasure for their guests.

The school orchestra started things off with some very catchy music, and soon the floor was covered with graceful exhibitions of everything from a "wigggle" to a "turkey trot." This loosened things up and we were all prepared for the evening's fun.

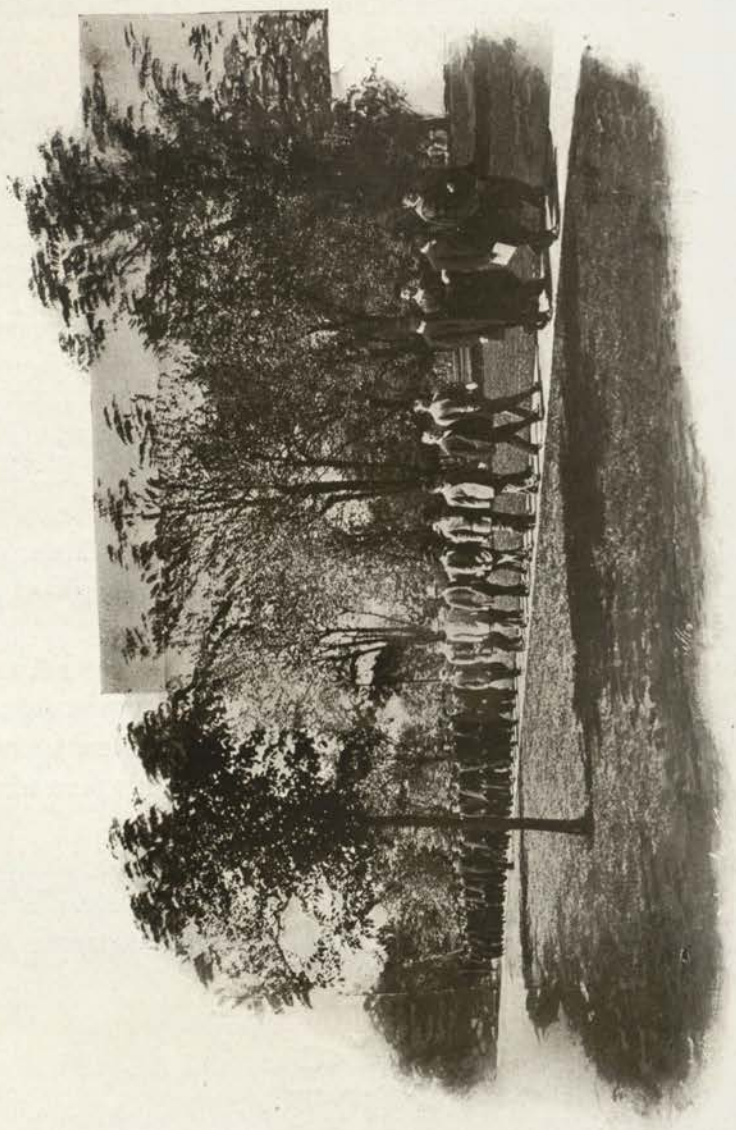
The mats were brought in for the athletic events. First, Hubbard and Cline wrestled, Hubbard winning after a hard struggle. "Pat" Coaske then gave us several selections on his violin. The music brought down the house and it was only after several encores that he was allowed to quit. Castillon and Garcia put on a most exciting (?) fencing bout, which Castillon won by a few points.

Next Sherry and Farhendorf wrestled with the stick. Both men fought with all that was in them and the contest was decided a draw. The mandolin club entertained us for the next few minutes with some delightful music. Cowman and Gellineau wrestled, with Cowman getting a little the better of it. Three fast boxing matches followed between C. O. Smith and McClure; Boucher and Wagstaff; and Koch and Hudson. These matches caused no end of fun and concluded the athletic events of the evening.

The feature of the evening was the pie-eating contest between Barclay, Halsey, "Puss" Irwin, and Carl Hamm. The performance was very exciting and hard fought, and cheers from the supporters of the various contestants filled the hall. After just forty-eight seconds, Hamm was outside of his pie and was declared victor.

By this time everyone was hungry and we adjourned to the shop where the Freshmen had provided abundance of coffee, sandwiches, etc. We ate our fill, gave the Freshmen three rousing cheers, and "beat it," everyone agreeing that the smoker was a huge success.





COMMENCEMENT DAY



UNIVERSITY OF MISSOURI
SCHOOL OF MINES AND METALLURGY

THIRTY-NINTH ANNUAL COMMENCEMENT

WEDNESDAY, JUNE FIRST

NINETEEN HUNDRED AND TEN

10:30 O'CLOCK A. M.

PROGRAM

Music - - - - - "The Passing Regiment" - - - Mackie-Beyer
SCHOOL OF MINES ORCHESTRA

Invocation - - - - - REV. F. M. WEDDELL

Music - - - - - "Apple Blossoms" - - Kathleen A. Roberts
SCHOOL OF MINES ORCHESTRA

Commencement Address - - - - - "Some of the Essentials of Success"
DR. CHARLES S. HOWE
President of Case School of Applied Science

Music, Overture - - - "From Dawn to Twilight" - - - C. W. Bennet
SCHOOL OF MINES ORCHESTRA

Address - - - - - DR. A. ROSS HILL
President of the University of Missouri

Theses - - - - - Read by Title Only

Conferring of Degrees - - - - - by the President of the University

Music - - - - - "Symposia Waltzes" - - - Theo. Bendix
SCHOOL OF MINES ORCHESTRA

Benediction - - - - - REV. F. M. WEDDELL

Music - - - - - "Cycles" - - - James E. C. Kelly
SCHOOL OF MINES ORCHESTRA



Seniors' Trip



ON Friday morning, March 10, according to orders, the bunch met at the American Hotel in St. Louis. Here they were met by "Dud" and Mann. We were very sorry that "Cope" was not there, but having taken a dry-land dive down the stairs of his rooming place, a few nights before, he was not able to be with the fellows the first day.

A bunch of this size marching along the streets of St. Louis caused quite a commotion. After some little argument between Dudley and Mann, they started out and the gang followed. After walking about three blocks we boarded a street car and rode a block and then we all got off because the car was going the wrong way. Then they led us down an alley where "Red" Forrester came very nearly being kidnaped by a lady of dusky hue. We had hard work keeping "Pete" back when he saw a sign "Boy Wanted."

Arriving at the National Lead Works we met our old friend, "Boogher" Boyer. Saw the manufacture of white lead and lead pipes. Elmore got very worried because they wouldn't stop the machine while he took a picture.

From here we proceeded to Broadway, where we took a car for South St. Louis and visited the St. Louis Blast Furnace Co. We were very much disappointed to find the furnace shut down. After staying awhile here we walked on towards the Edgar Zinc Smelter.

It being noon-time we began to cast about for a place to eat. Hotels being a minus quantity, anything from a free lunch up to a fish counter was appreciated.

After dinner we took a short rest and then proceeded to the zinc works. Here we saw everything from the roasting of the ore to the drawing off of the zinc. This ended the official part of the trip for the day, but on the way back the bunch stopped off to take in the wonders of the Anheuser-Busch Brewery.

In the evening the different groups amused themselves in the manner best suited to their tastes. Some of them, however, kept rather late hours, for at the appointed hour next morning very few were there. Prof. Copeland was with us this morning, and, being his first day out, he was feeling rather frisky, and started out immediately. This morning we got on the right car, but with very few fellows. Among the missing was Dudley, the boy wonder, who forgot to tell his wife goodbye that morning, and had to go back to the hotel.

The first place we visited in the morning was the Scullin-Gallagher Steel works. Here we spent the whole morning seeing many things of interest. Again as the day before, we ate our dinner in any place we could find.

After dinner we went to the Laclede-Christy Fire Clay Co. works. Before entering the plant the roll was called and Pete and Pudie were missing. No one had seen them the whole day, and whether they were dead or asleep, no one knew. After wandering about among the kilns for a few minutes we went through the factory. On the first floor they were making bricks. After seeing this, we climbed to the next floor. Here they were making bricks, too. Then we climbed to the third floor where they were making some more bricks. In wandering



around here we discovered a potter's wheel, and Elmore amused the bunch for a while.

By this time our feet were blistered from standing on the floors of the drying rooms, and we were glad to know that we had seen all of the brick makers make brick that there were in this brick factory. Also, that tomorrow was a day of rest.

After spending a lovely (?) Sunday morning in St. Louis we once more sought the Union Station and boarded the Iron Mountain train for Flat River. Prof. Copeland and a few of the fellows who had been at Flat River before remained in St. Louis and took a trip to Alton.

The train had no Pullman coaches and sometimes even became rather speedy in its course along the "Father of Waters." Nevertheless, the afternoon passed rapidly, due to Doctor McRae's large supply of funny stories and jokes and to Mann being in such exuberant spirits. Pudie entertained the co-ed.

We arrived in a dry town on a Sunday night. Lunak and "Red" Blake located all the churches, but even the most ardent Rolla church goers refused to accompany them on their search of spiritual wisdom. Elmore and Coaske gave the hotel loafers and us some guitar and violin solos while some of the bunch played nosey poker.

Monday morning everybody but "Little Eva" tried to make a hit with the pretty waitresses and then the profs herded us together, and after waiting until Dudley and Forbes came over from Farmington, we visited the Doe Run Lead Company's power plant and looked with great respect upon the revolving field alternators that we had been told existed by Dr. McRae the term before.

We walked over to mill number three, and here our dear ore dressing instructor was in his glory. He had memorized the flow sheet of the mill by heart, and wasn't satisfied until he had recited it to each individual. After we had ridden on the belt elevators, stuck our hands into the bed of Hancock jigs, and talked politics with the straw bosses, we hoofed it back to the hotel. Dudley saved four bits by not eating any dinner, an indication of a great financier.

In the P. X. we inspected the rock houses close at hand and then walked over the hills and far away to St. Francois. Here we discussed the advantages of the underfed fire boxes over revolving trommels with the superintendent of the St. Louis Smelting and Refining Co.

The next morning we went down the Federal No. 1 shaft and our "Fair (?) Co-ed" wished that she had brought her harem skirt along. Cox and Forbes carried our precious Eva up the stopes while the beardless wonder, Dudley, carried her pocket book.

Then we went to the Federal mill and nearly missed our dinner following Dudley in his search of more thorough knowledge of ore dressing. In the afternoon we had the pleasure of following Dr. Buckley on the geology trip. We saw many "what-nots" that are not found around Rolla, and even Cox was puzzled at the concretite we saw in a stream bed.

All the evening enjoyment we had was going to the same moving picture show that we went to the night before. At four bells in the morning the Hammond Hotel management was astir. We were leaving and they had to be on hand to see that we didn't pack the whole hotel in our suitcases and bring it to Rolla. At a very early hour we went through the smelter at Herculaneum. Here our

misguided co-ed thought she was making an awful hit with the superintendent when in reality he was taking care of her so none of the workmen would hit her with a chunk of slag.

We were a dirty bunch that arrived in St. Louis that noon, but, nevertheless, we went through the Union Electric Company's power house and saw how they ran the elevators in the Bank of Commerce building.

This evening the trip closed and the fellows took their own time in getting back to Rolla for St. Pat's Day. Most of them were so near broke that they came back Wednesday evening.

Thus ended the trip that we had been looking forward to for so long. We saw and learned many things that will perhaps some day be of great benefit to us. Most of the instructors had been on the trip so often before that they knew the straw bosses by their first names and could tell us all about everything, and Dr. Hielscher furnished some amusement. To the Dr. we are very much indebted for his unlimited supply of foolish questions and his fatherly care of our "Little Eva."

This closes our story. We haven't told you all, because there are some things you shouldn't know. But we hope that we have left the impression that we had a pleasant, profitable trip.

An Ode to "Icabod"

Now there was once a man in the school
Who insisted on acting the fool;
He was called "Icabod,"
And he'd bow, scrape, and nod,
But he always was treated most cool.

In the library room he would sit,
For he thought that he'd sure make a hit;
And he'd crack a bum joke
On the dignified (?) "Cope,"
Though his efforts were lacking in wit.

"Loves Labor is Lost," so they say,
Though Prof. Gaba is still "in the way,"
Hangs around at all hours,
And brings her sweet flowers,
He'll receive for an answer flat "Nay."



Saint Patrick's Day

St. Patrick: A. W. HACKWOOD

Committee

W. PORRI, *Chairman*

A. H. CRONK

H. K. SHERRY

G. E. ABERNATHY

A. W. HACKWOOD



HERE is some doubt as to just what day St. Patrick was born on, but the faithful followers of the patron saint of the engineer showed their respects to the famous engineer by celebrating his birthday on March the seventeenth. The celebration was in charge of the above committee, appointed from the Junior class, and it is due to them that the celebration was so successful.

All the companions of the order, a number of the princes of the noble blood, and the faithful followers in and near Rolla, assembled at Killarney station at 8:30 A. M. to meet his excellency. St. Patrick arrived on scheduled time, riding in a beautiful float surrounded by his favorite attendants and guarded by an escort of six soldiers. These soldiers wore the original uniforms used when the order was founded in 1783 and each carried a rusty musket presented to the original Guards of St. Patrick by King George III of England.

While the Rolla Band was playing "The Wearers of the Green," the assembled faithful ones formed in order of march. The parade was headed by the band of fifteen pieces. St. Patrick came next riding in his float, his escort of soldiers following. Casey Jones, the famous engineer who made the record time for the Frisco between Rolla and St. James, came next in the very locomotive that won the record. The Sophomores and Freshmen were represented by suitable chariots for their presidents. The band struck up "St. Patrick was an Engineer," and the parade traversed the famous brick streets of the business district and the principal boulevards of the metropolis on the crest of the Ozarks.

The parade ended in front of Norwood Hall. The entrance was decorated for the occasion and St. Patrick took his position under the Shamrock and the Stars and Stripes. His Saintship waved his shelalah and ordered his loyal sons to kow-tow. Then he warned us of the snakes that are found in the beverages sold on Eighth Street and told us to beware all such reptiles.

It was then announced that there were many men and one woman who had unblemished records and were about to be knighted in the Order of the Knights of St. Patrick. So from "Old Faithful" clear down to "Little Eva" the Seniors were taken into the Order. A solemn hush then fell on the assembly while one of our most illustrious peers was lead forward by the Guards of St. Patrick. V. H. Gottschalk, a humble aspirant to the honor of the order, knelt at the feet of the Saint and kissed the Blarney Stone thrice and was knighted while the



March

17



-1911-



throng of loyal sons cheered. A salute of six guns by the Guards of St. Patrick closed the morning festivities.

The program for the afternoon was not pulled off on account of the rain, but instead it was turned into a smoker at Mechanical Hall in the evening. First on the evening program came the tug-of-war between the Sophomores and the Freshmen, the Freshmen winning after a hard and exciting struggle. Wrestling between Hammond and Gellineau followed, Hammond winning in two falls. Castillon and Halsey boxed in a most capable way, and the match was declared a draw. Smith of the U. S. Bureau of Mines took Sherry on for a wrestling match. Sherry tried hard, but Smith proved exceedingly proficient in the art, and soon put his opponent on his back. This was followed by a selection by Pringle on his mandolin. Gray and Kelly boxed, and Kelly managed, by working hard, to win second place. In an exciting three-legged race, Thomas and Lodwick won first place. "Tommy" and Hamm then boxed for three rounds. It was certainly exciting and lively. They both showed science and skill in the gentle art, but Hamm's superior head-work gave him the best of the match.

To end up a very lively evening Mr. Smith of the U. S. Bureau of Mines gave us a talk on mine rescuing apparatus. He demonstrated his talk with one of the helmets used, explaining it fully. He also showed us one of the machines used for resuscitating the rescued miners. His talk was appreciated by all.

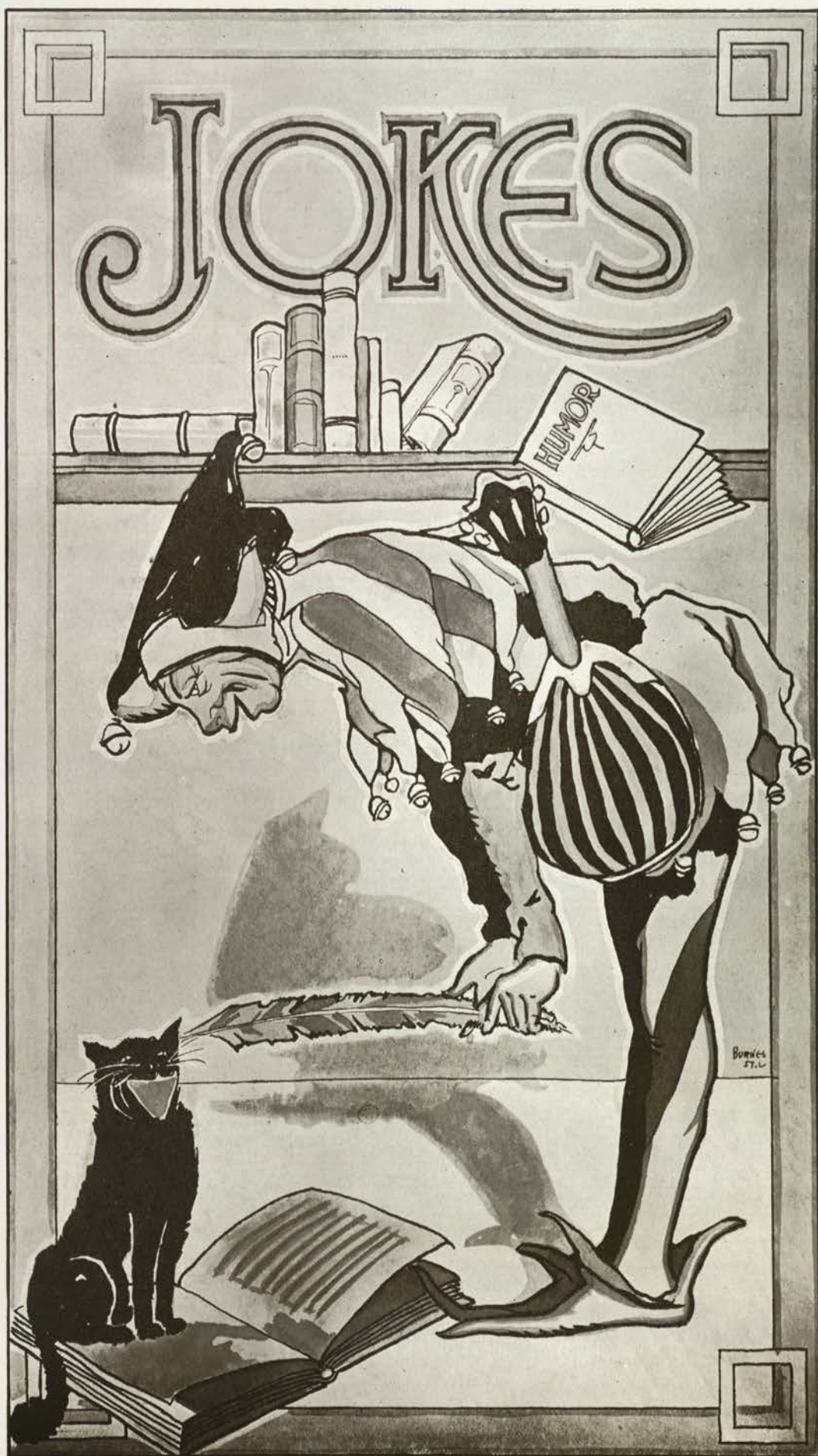
Thus ended the celebration of St. Patrick's Day. Everyone enjoyed it and declared it was a huge success. We hope that future celebrations will be as successful and as appreciated by all who take part.



MR. H. L. TEDROVY

BOOK VII.

JOKES





Ye M. S. M. Student's Diary



THE SAME being a rehearsal of deeds, doings, misdoings, frolic, frivolity, fun, good times, exam times, appetites, thirsts, good fellows, and the *Faculty*. In other words, a complete summary of the four years' course at M. S. M., embracing not only a mention of such technical dope as we absorbed by contact with so worthy and efficient a *Faculty*, but the side issues so essential to a college course and so dear to youth.

TO ALL, who at any time, have inscribed their names on the M. S. M. register, whether they be now alumni, under-grads, or those who have left due to conflict with the ten-hour restrictions so characteristic of the School; those of you who have gone before and to whom M. S. M. is now a memory, read and be refreshed; ye who are at present enjoying the benefits of our Alma Mater, read and be warned; ye who have suddenly left M. S. M., by the ten-hour route, read and be consoled. To all of this and these this article is humbly and affectionately dedicated.

Freshman Year

Arrived in Rolla on the Meteor. Saw many strange objects at the depot. Many of them wore corduroy trousers and wide-brimmed hats. We thought them tillers of the mountain soil and cowboys, but have since learned them to be Sophomores in the institution that we were to grace with our presence. A bandy-legged negro, answering to the name of Poss, grabbed our suitcase and piloted us up Eighth Street, past the prohibition headquarters and on up to the Grant House, where we refreshed our inner-selves at the six o'clock seance called dinner. After this, our first departure from home-cooking, we mixed up with the rest of the new comers and spent the rest of the evening in being regaled with the time-worn talk that is always imparted to the new and unsuspecting by the old-timers that haunt the Grant House lobby and soak up heat. We finally got to bed carrying into our dreams a confused memory of the strange things we had heard. Our dreams ran something like this: Rev. Charles Parker, the minister, had induced "Louie" Young to shave off his whiskers and Dean had gotten sore over the affair and had resolved to quit fishing as a result. Then Harris, not to be outdone, swore that he would pass some one in Hydraulics if the dignity of the school was to be thus assailed. In fact, all the profs were much worked up over the presumption and each and every one threatened to vent their spleen in the following manner: Cox vowed he'd cut his hair all off; "Gotty" gave up Bull Durham; "Peter Jimmie" contemplated leaving the Grant House; Eggleston threatened to give an interesting lecture in Geology; Copeland was to refrain from stammering, stuttering, and fussing; Doc McRae wanted to cut Thermo out of the course; and "Daddy" Scott promised an exhibition of fancy dancing. When all this influence was brought to bear upon the Director, he promised to cultivate the foliage again and gave his safety razor to Boyd Dudley who was just commencing to sprout his pinfeathers. This enraged the

Rev. Parker to such an extent that he renounced his vows of ecclesiastical fealty and opened up a pool room. At this stage in our dream the smell of stewed prunes floated up from the Grant House kitchen and we awoke from the odor in time to hear the iron tongue of time on the Rolla Building toll the hour of eight.

For the next week we were kept busy dodging the Sophomores and "frats." The Sophs got to us first and they rubbed our noses in the dirt with great gusto, adorned our new thirty-five cent hair cuts with green coverings, and made us give canine salutations to the moon for the edification and delight of the young ladies in Rolla, who take great interest in these festivities coincident to the incoming of each class of future great mining engineers.

After the Sophs had humbled us sufficiently, the "frats" started in to impress upon us the light, rights, benefits, and excellencies of their respective "Bunches." There are five frats in Rolla, including *Tau Beta Pi*, but this last-mentioned frat seemed to have no designs on Freshmen. The other four kept us busy at meal time and furnished us sleeping accommodations, wherein we dreamed of the beauties of fraternity life to the melodious accompaniment of our manly vibrating noses. As we could not favor but one frat at a time, the others meantime criticised our looks, manners and clothes. The decision of frats was a hard matter to agree upon, as they all had their fine points, but we finally fell for the *Sigma Pi Alpha Nu* crowd as being the best, as they were less in debt than the others and had two assistants-to-the-faculty in their ranks. After this choice, we were about as amiable with the other frats as two strange bulldogs. They couldn't see us with a microscope, and we awoke to the fact that in the future we would be required to pay board and room rent, as the hospitality had become a thing of the past. Our popularity had suddenly left us.

Another awakening on our parts divulged the fact that M. S. M. did not only stand for rough-house and frat-life. It seemed also to require some of our time at school. So we began to go to school a little, cautiously at first, as the upper classmen had warned us against the evil of letting the pros get too well acquainted with our names and faces so early in the game, as it might interfere with our recreation later on if they got to know us too well, and expecting us too regularly. But we had so much fun in Scott's English Vaudeville that we hardly ever missed going to school for that class daily, thereby keeping up our attendance record.

The year passed quickly and pleasantly from now on, with occasional smokers, football games, and heart-to-heart talks with our Director regarding the bad financial condition of the Athletic Association and the still worse condition of our scholastic record in shop, chemistry and drawing.

At the end of the year we had learned not much technical dope but we could run fifteen balls at "Charlie's" and inhale cigarettes just like "Gotty".

Sophomore Year

We came back this year with new zeal, much enthusiasm, and six "cons" behind us in Freshman work. We tried to do honors to this year's Freshmen with the same vigor and thoroughness that has been shown to us when we occupied the now hated position. The records show that we did well.

By this time the other frats had begun to speak to us, and to one another again, and we found ourselves in a much improved and exalted position as Sophomores. We joined the Athletic Association, bought a pair of corduroys, and a copy of Dean's Calculus Notes. We charged all these and everything else with upper-class nonchalance. Being thus fully equipped with the essentials we felt equal to the emergencies of the coming year. During this year we became intimately acquainted with Dean's eccentricities as well as his excellencies as a preceptor of the equation of the parabola, and learned in a measure to differentiate some of "Gotty's" flights in chemistry. We passed up Qualitative due to the fact that Dutch Riede talked in his sleep and gave away some of the analysis. All this year we managed to maintain a haughty demeanor toward the Freshmen and finished the year with nothing of more momentous importance than five more "cons" in Soph work, three of which were in Calculus. Still we felt that we were improving our condition as students and by spring were so far accepted into the spirit of the school that the profs commenced to call us by our nicknames on the streets and by various unprintable names when we failed to stay awake in class. All of this went to show that we were considered worthy and accepted part of the institution. Besides this evidence of confidence on the part of the school, all the merchants had our names (and accounts) on their books, and we felt that we were really and truly bona-fide students.

Junior Year

Again we are back in Rolla with our minds made up to remove our eleven "cons," play football on the 'Varsity and make *Tau Beta Pi*. After registering at Norwood Hall and shaking hands with all the profs, we look over our past record as students and it makes us "C-sick"—apologies to Dean,—that's his joke, and it's copyrighted, or ought to be, for he sprung it on us nine times in our Sophomore year. We had a hard time deciding how to sign up so as to avoid Hydraulics and Thermo. It was simply a case of Special, General Science or quit. We nearly decided to quit, but we wanted to see (not hear) Copeland's lectures in assaying and see Harris teach Hydraulics by the gesture and memory method. Besides that, Charlie was going to pull off a pool tournament that fall, and we wanted to show that our college education was of some benefit to us by making a good showing with our cues. So we decided not to quit, and of the remaining evils we took the lesser, taking the Special course, which was originally designed for Bob Mook and Dutch Karte. This course is rather liberal and means that a fellow can take anything he wants to, providing he makes it as easy on himself as possible without coming in contact with the ten-hour statute. "Red" Dixon and "Buck" Owen claim, after going against it repeatedly, that there is nothing to the aforesaid statute except that it develops a fellow's imagination in concocting internal and external ailments to be used before the Faculty in self-defence.

The football idea didn't work out well because it would have necessitated the giving up of cigarettes and would have interfered with our afternoon course in "girlology and recreation."

As to the *Tau Beta Pi* idea, that fizzled also, because one of the members thereof had a personal grudge against us simply because we had a few flunks to our credit (?). So he slipped us the black "pill" when the faculty proposed our

names for this honor, but we know who did it, and if we wanted to be nasty we could prove that we saw this same guy getting the front of his vest all shiney from leaning up against the counter in the Arcade. Some guys get away with an awful lot of credit and scholastic standing and at the same time do things that we wouldn't think of doing. Just the same, they pull down the Es, simply because they like to go fishing, and we other poor "guineas," who do nothing worse than play "penny ante" and "crib" in Spanish, get a monotonous and unbroken string of Cs. Such is life!

At the end of the second term of the year we lost out, only passing nine and a half hours, and we were asked why. Of course, it was only decent of us to explain, so we ran over all the mythological and hereditary ailments that the student flesh is heir to and that had been successfully worked on the Faculty since time immemorial. We thought over everything from diabetes to sore eyes, and finally decided on several diseases that statistics showed were nearly always successful in the past. Dividing these ailments among us, we studied the symptoms characteristic to our peculiar affliction and sallied forth to hoodwink the Faculty. We accomplished our purpose as we expected, so we were allowed to remain on the school roll that spring, meanwhile enjoying the fishing and bracing mountain air, while occasionally we went to classes.

We got through the term all O. K. due to a few lucky guesses in Assaying and Quantitative Lab. Some of us could tell the constituents of the ore by simply observing the color and odor, and occasionally referring to some other fellow's notebook who had previously taken the trouble to run it.

Along about the end of this year (and every other year, for that matter) we started our course in "frenzied finance," which means simply ways and means of reimbursing the accommodating merchants and trades-people who had so sweetly furnished us with such accessories and luxuries as were essential to our college course and for which we did not have the ready cash—because the pool-room took what little we had to spend after we had settled our frat dues and poker debts. And we also had to devise a system of getting our trunks out of town, in event of our failure to appease "Old Man" Jeffries. This gentleman of color was the most peculiar and unreasonable person about unpaid bills I ever saw. Some of the boys kept in excellent training just from making long detours and quick "get-a-ways" whenever they saw this Nemesis from a distance. He never got close, for all the boys knew the alleys and side streets blindfolded. But in June of every year you can find this same Jeffries down at the depot personally supervising the departure of the boys with a list of delinquents in his hand and blood in his eye. Why that man could watch more trunks and more fellows at one time than anyone else on earth, with the possible exception of Harris during an examination. Jeffries knew all the trunks by their key-holes and could tell off-hand just how much dirty linen each of their owners had "overlooked" paying for to date. But we finally got away, resolved to get a job "mucking" that summer to relieve the pressure caused by our bum poker hands during the past year and the American Beauty bouquet that "Baby-Doll" carried to the Commencement Ball.

Senior Year

Due to our summer's labor we came back strong both physically and financially. Paid off Heller, Faulkner, Scott, Smith Bros. and Jeffries for last year's value received, and consequently felt more easy in walking up and down Main Street with our "lady friend" past the stores that no longer had us "on the books."

Now came the realization that this was our Senior year and that we were going to have to do some tall thinking if we were to have seats on the platform next Commencement Day with a cap and gown adorning our manly figures. But nothing daunted, we hunted up all the "dope" available on how to graduate when you don't deserve it. Finally we ran across G. Hewitt Boyer's personal notes on his useful little monograph, entitled, "How I Removed Sixteen Cons and Flunks and Graduated in My Senior Year." This admirable work gave us much hope and many suggestions that were of great benefit to us in the colossal undertaking we were about to embrace.

We then looked up our back work and the offending profs were visited by a committee, which was selected by virtue of the following reasons: one of the boys had a drag with "Gotty" because he could make vile smells in the laboratory and he could also speak a few words of German, learned in the two years course in German under "Peter Jimmie"; another who was an ardent fisherman and could dope out simple "max and min" problems, waited upon Dean; another undertook to see Harris, not because we thought he (or anyone else) had any "pull" with that estimable prof, but simply because this student was gifted with a remarkable memory and an uncanny faculty of figuring out what Harris was talking about from his pantomimical movements and gestures; we also dug up from our numbers a fellow who knew what $PV=K$ meant and delegated him to work on "Doc" McRae. We awaited the reports of our consorts with bated breath. Well! they held out some hope for us and the next two months found us burning the midnight oil consistently for the first time since we entered M. S. M. Finally, we got all the cons removed except those in shop-work, but that never was intended to be passed up until you had put in a day or so admiring and assisting Bowen in that onion and potato patch of his that "Peter Jimmie" showed him how to manage and make fruitful.

During this period of enforced seclusion on our parts while we were doing three years' back work in two months, the pool room nearly went broke and the girls got up a sewing-and-gossip circle, just imagine a Rolla girl doing either; it showed clearly their desperate need of men, which I believe they emphatically deny.

This was soon over, however, and Charlie Parker got the rust off his cash register and the girls commenced to have their phones put back so we could make arrangements for the coming evenings.

Commencement was not far off and it began to look like we were going to be able to send home for the folks to come and see what they had "sold the old cow and mortgaged the home" for. Then arose the question of how long they had better be in Rolla and who it would be best to have them meet, keeping in mind always the primary idea of not letting them get too well acquainted with our past history. Some folks are so old fashioned, you know, that they might not un-

derstand at all that the things they might hear of us were part of a complete college course. Well, we finally decided to have them stay with old Mrs. X., who had seen us at church once, and besides that, Mrs. X. had a bad case of chronic asthma and couldn't talk much. Her house was warm and clean, anyway, and she would look out for the comfort of our folks.

At last the eventful day came, after a week's frantic effort on our part to get our room expurged of all bottles, poker chips, and other impedimenta of our past frolics, which would leave the impression of our participancy in pursuits other than those of technical study. A notebook scattered here and there and an occasional geology, metallurgy, or mechanics left carelessly open at a much-thumbed page, added greatly to the studious appearance of our rooms. It now only remained for us to hunt up our Bible and make it conspicuous and burn up all our old reports and other damning correspondence from the School, and our student quarters were ready for inspection by the most prying and fastidious "paw and maw" in the whole lot.

Commencement Day fulfilled the promise of the beautiful dawn that we were still up to witness on the night before. All the gang were up in front with their cap and gown upon their apparently cherubic heads and figures. To look at that bunch on this occasion you would never dream that they had in their midst all the School "celebrities," ranging from the best pool and poker player, past the boy with the greatest number of consecutive cuts, and the one with the sleep record, and on up to the most persistent fusser and ladies' man in School. To be sure, we had some few students in our line up, but they were about as plentiful as the hairs that ventured through the glistening surface of Cox's barren scalp. These were the men that were banded with us in the bonds of Class Umpty Never Umpty Leave, and we were as proud of their various "accomplishments" as if every one was as wise and handsome as Boyd Dudley himself.

Then came the speaking coincident with this kind of a function. Our Director made us one more heart-to-heart talk and dwelt on our futures rather than our pasts. (This was some relief to us, I assure you.) Even the Faculty seemed sad about something and not a smile disturbed the repose of their well-combed whiskers. They may have hated to see us go and they possibly experienced the same regret that the feline does when a mouse escapes into the friendly hole-in-the-wall.

Next came the orator of the day, who graphically spoke to us on what the future held forth to our young and unsuspecting minds. He depicted for us the snares, pitfalls and failures; as well as the pleasures, successes and glories. Which would we take? We all decided at once to become good and great men, attain vast wealth, and some day come back and endow M. S. M. with two new courses to supplant those now going under the names of Ore-Dressing and Shop-Work.

But aside from the humorous side of the event, there was a solemnity and impressiveness about this Commencement Day that permits no levity, and we shall close our Student's Diary with a brief observation on the lasting sensation of this, our last day as care-free students. For the morrow would dawn upon us no more as irresponsible boys, but as *men*, and still better, as men fully equipped with the implements for life's work, a good education and the desire and determination to succeed.

As we sat in dear old Mechanical Hall that sweet June morning, we felt that the world awaited our conquest. For are we not young and untried? Does not the world expect great things of us? Do not our darling fathers and mothers sit in the audience and ask as their reward that we repay their loving kindness by many years of putting forth our conscientious efforts to succeed in the "game of life" that now requires our services as "players" therein? Does not a sweet vision of girlhood let her heart throb in complimentary phase to our young and buoyant hopes with the confidence that only the young in life can experience? All these questions crowd into our minds with marked distinctness as the sweet mountain air breezes through the impressive quiet of the Hall and cools our brow that fevers with the heat of suspense.

One more act and the curtain falls on college life, shutting out its trials and pleasures, thereby ending the drama of youth. As a fitting climax, our "sheep-skins" are passed out to us as our license to go forth and combat the world as it is, not as we have pictured it as students, but as the cold, hard world that only softens its possibilities to the man who knocks at its portals of opportunity with the pass-words, earnest effort and square dealing.

We have evolved this Day from students to men! The class of 1911 is no more! But let us hope that what M. S. M. has lost as students the world will gain in good, square men! ADIOS!

For the Faculty

Now we must not forget "one on Dean,"
For 'tis easily known, felt and seen,
That he always gets "his,"
Oh, that good old "math-wiz,"
He's the Prof. that has always "come clean."

Mr. Dudley, whose first name is Boyd,
Seems to have an expression most void,
But he's young yet, you know,
And his "brain-box" may grow,
Thusly making himself more enjoyed.

In the faculty we have our "Cope,"
With his handsome black head full of "dope,"
On all subjects he's "wise,"
Even "fussing" he tries,
But his young "Brother Bob" blasts his hope.

Old Terry McVey may be slow
In his "speech" and the way that he "goes;"
But just give him a girl,
And then watch the "things whirl,"
And exceed the "speed limit," By Jove!



Ancient Order of the Sons of Rest

MOTTO: Toil is bitter; rest is sweet.

CLUB MASCOT: The Hook Worm.

EMBLEM: The Can.

SONG: Please Go 'Way and Let Me Sleep.

Preamble: We, the restful men of the Missouri School of Mines, being constantly harried by our enemies, the boners, grinds, and workers, do hereby organize ourselves into a protective association to promote rest. The organized period of rest to extend from September 3d to May 26th.

Members

IN THE FACULTY

J. Terrence McVey

Joseph Henry Bowen

IN THE SCHOOL OF MINES

Cummings

Abbott

Barclay

Copelin

Kurz

Chase

Schmidt

Gleason

Brewer

Some Fussers

There are Powell girls, three, "in the ring,"
Who can ride, dance, skate, fuss, swim, and sing;
They can also cook swell,
O, you Edith, Grace, Dell,
With your lovers galore, "on the string."

With Edith, Coach Dennie is known
"To have and to hold" for his own;
But 'tis "Sibyl the Young,"
Whom they often wished hung,
For she never leaves these two, ALONE.

Mr. Pudewa, dark, fat and sleek,
Has the care of Miss Grace all the week;
And on Sundays he goes,
With his well-powdered nose,
Sharp, black eyes and his "damask-like" cheek.



Prof. Scott: "Now, Mr. Koch, joining these two ideas together what will you have?"

Mr. Koch: "I'm not prepared, sir."

Prof. Scott: "What will you have, Mr. Hudson?"

Mr. Hudson: "You've got me."

Prof. Scott: "What will you have, Mr. Carlson?"

Mr. Carlson: (awakening) "I'll take a bronze cocktail."

Tedrow: "Did you hear about the accident in the Physics Lab.?"

"Mac:" (biting as usual) "No, What was it?"

Tedrow: "Jimmie Beach fell off the Wheatstone bridge and got drowned in the current."

Prof. Copeland: "Isn't the quartette great?"

Prof. Gaba: "Yes, it grates horribly."

St. Peter: "So you say that you are a student of the Missouri School of Mines?"

Candidate: "Yes, sir."

St. Peter: "Did you buy an Athletic Association ticket and did you subscribe for the Rollamo?"

Candidate (faltering): "No, sir."

St. Peter: 

Macomber, standing under the new stack at Herculaneum, and looking upward, "Mann, is this stack in operation now?"

Raj in Ore Dressing quiz. Roll shafts are sometimes mounted in swindle bearings.

Prof. Cox: "Can you shave me without taking off my collar?"

Charley Bunch: "Yes, and I can cut your hair without taking off your hat."

Pringle: "I felt sure if I called upon you, that I would make a hit, don't you know?"

Mildred: "Yes, and I think it will be a home run. I hear papa coming down the stairs."

Enoch: "If I should attempt to kiss you, would you call for help?"

Ethel: "Yes, if I thought you needed it."

Question. Give evidence of hot ascending solutions in the Coeur d'Alene District.

Answer. The district is faulty, the replacement of the wall rock shows it and the continuity of the ore with depth from hot solutions as the cold could not carry so much and calcite and replacement show that it was hot solutions.



Compressed Air

Time; exactly five minutes after the bell rings. Enter; Elmo Golightly on his toes, takes his seat on the throne and carefully adjusts his nose glasses, and begins.

"Gentlemen, in regard to the article we had yesterday, as simple as it may seem, yet I am afraid the student doesn't understand it as he should. I will now put it on the board in a little clearer form." Carefully selecting one of his cards he steps to the board and places the Greek before them.

Student: "Professor, I don't see how you get the first part of the problem."

Professor: "Now, don't ask me any questions, I am doing the best I can. I will explain again." Once more we witness a series of movements which are difficult to associate with a compressed air problem.

Professor E. G.: "Now, I have a mental communication that the student still doesn't understand this problem, but copy it down and study it out by yourselves."

"Now, I will show you how we may derive the same solution by means of the table in the book." The result is obtained, but it doesn't check.

"Gentlemen, let me think, as I have often told you, it is not safe to jump at conclusions." After tapping his forehead with his finger and the floor with his toe until half the bunch are asleep, he exclaims, "I have it! I have it! I laid a trap for the student and I have caught myself."

"Gentlemen, that is all for to-day. Tomorrow take ten more articles and hand in the complete solutions of exercises 21, 22, and 23. Also come prepared on Tuesday and we will have a little quiz. Be sure to bring a nice clean sheet of paper with nothing on it."



Prof. Forbes



Acknowledgments

We wish to express our thanks to the following people who have aided us very materially in getting out the 1911 Rollamo.

Mr. E. Kahlbaum, for his aid with the photographs.

Mr. H. S. Owen, for "Ye M. S. M. Student's Diary" and other valuable articles and suggestions.

Mr. T. W. Blake, for the articles on the Colorado Trip and the 1910 Football season.

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Mr. J. S. Irwin, for the Mining Association article.

Mr. D. Copeland, for the Student Council article.

Mr. E. R. Needles, for the Sophomore Class article.

Mr. L. L. Lodwick, for the Freshman Class article.

Mr. C. C. Conover, for the Y. M. C. A. article.

Mr. E. Lynton, for the Track article.

Mr. O. A. Lunak, for the Athletic Association article.

Mr. F. E. Townsend, for the Senior Class article.

Mr. A. W. Naylor, for his artistic lettering.

In a very special manner we wish to express our thanks to Mr. D. C. Jackling, for his generous financial aid. His assistance did much toward enabling us to place this book in your hands.

We regret that owing to illness Mr. J. L. Keelyn had to resign from the Board. He worked very faithfully while he was with us. We hope that he will be back at school next year.

In concluding, we request our subscribers to patronize our advertisers. It is due largely to them that we can place this volume in your hands at about one-half the price of publication. Patronize them, and they can be relied upon to help with future publications.

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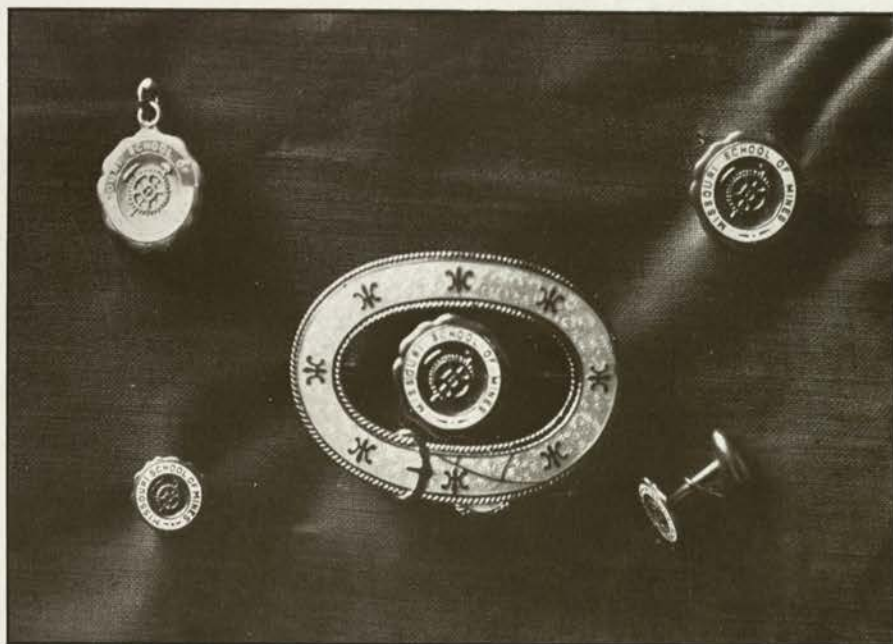
—

“ BOB ”

Though only a dog, he had many instincts that were human. He was a loyal friend to all the students and will be greatly missed by all who knew him.

He was killed by the fast mail train March 28, 1911.

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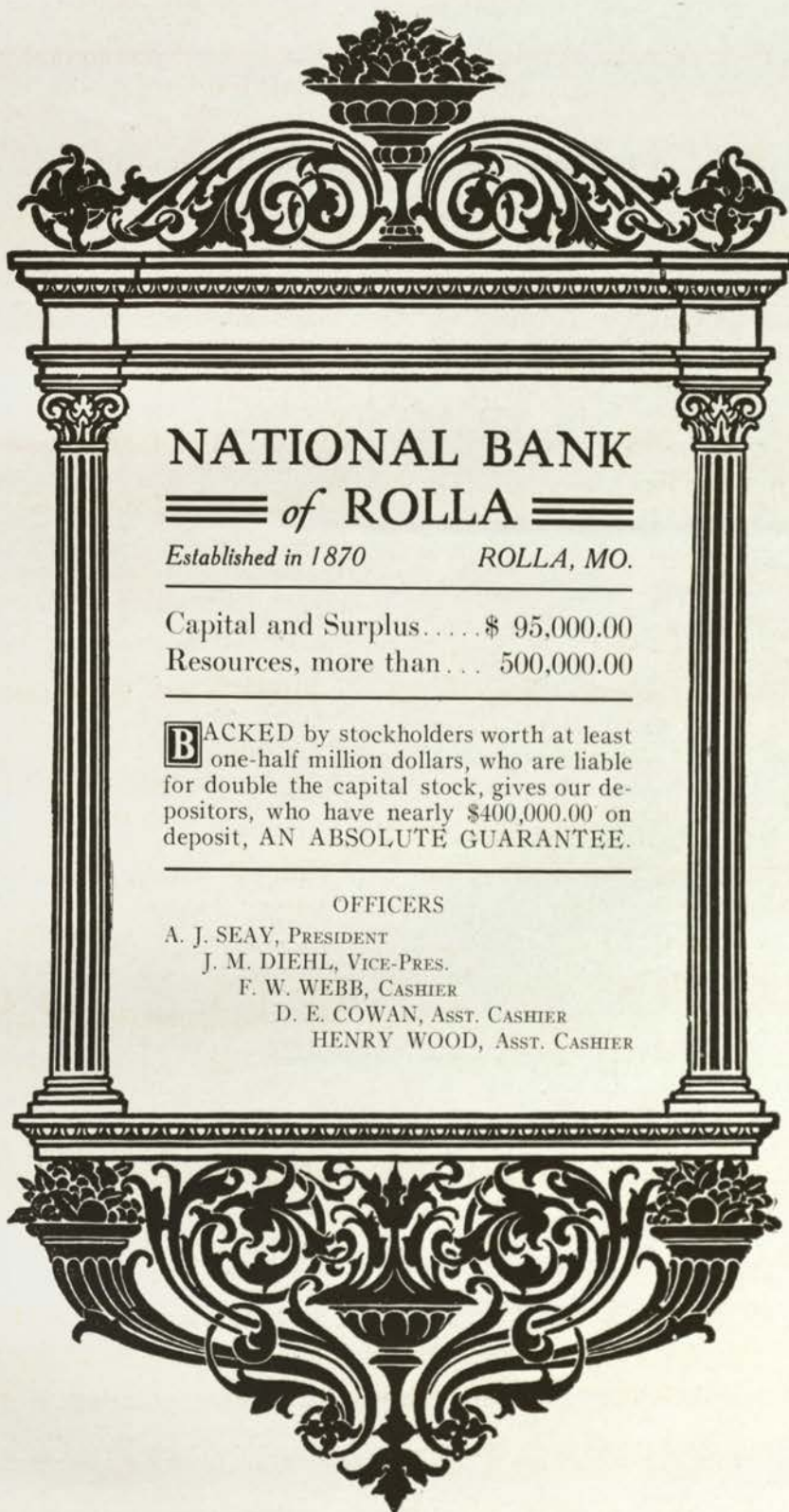
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Common Crooks	Bill Porri; "Doc" Raible; "Pewee" Willmot
Breaker up of the Hook Worms	"Louie" Young



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A society formed for education.

Motto. By the Gods, ye siren, I can not stay away.

Best Bringer of the Comers Back—"See you tomorrow night, dear."

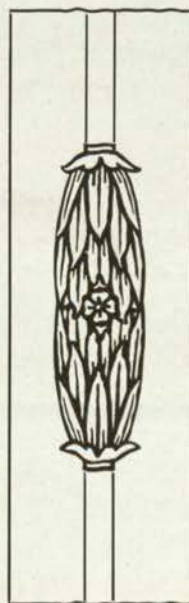
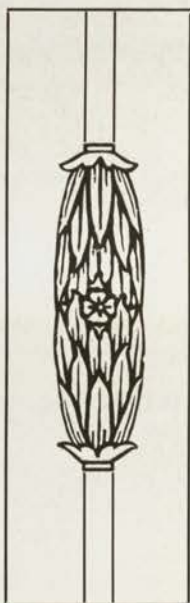
Next Best Bringer of the Comers Back—"But, dear, you know I'm strong for you."

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¶ In addition to articles usually found in a drug store our stock embraces: Eastman's Photo Supplies, Spalding's Sporting Goods, Musical Instruments of all kinds, Magazines, Pennants and M. S. M. Stationery, Plow's and Gunther's Fine Candies, Ice Cream and Cold Drinks the year through.

Let us see you often at **SCOTT'S**



Pauline: "Gee! This candy smells good."

Tedrow: "It certainly does. Let's stand here and smell it awhile."

Dr. Baysinger: "Nonsense! You haven't got a cancer. Booze is all that ails you. You must stop drinking at once."

Student: "Gee! Is it that serious? Why, Doc, I thought that it was some simple thing that could be helped by an operation."

"Do you really think that I am your affinity?" asked Prof. Copeland's 985th sweetheart coquetishly.

"My dear, you are one in a thousand."

Dell: "So many men marry for money. You wouldn't marry me for money. Would you, dearest?"

Howard: (absently) "No, darling, I wouldn't marry you for all the money in the world."

Kayser: "I shall never marry now."

Bertie: "Foolish man, why not?"

Kayser: "If you won't have me, who will?"

Packy: "Are you fond of lobster, Miss Gladys?"

Gladys: "Lobster?"

Packy: "Yes."

Gladys: "Oh! This is so sudden."

Copeland: "How long does it take a man to die when they hang him?"

Dudley: "Oh! Only a few minutes."

Copeland: "Your'e wrong. Gaba has been hanging around the library the whole year and isn't dead yet."

Gaba: "Hudson, What is a locus?"

Hudson: "Don't know. They aint any in Kansas."

Professor: "Next to steel, what is the toughest metal?"

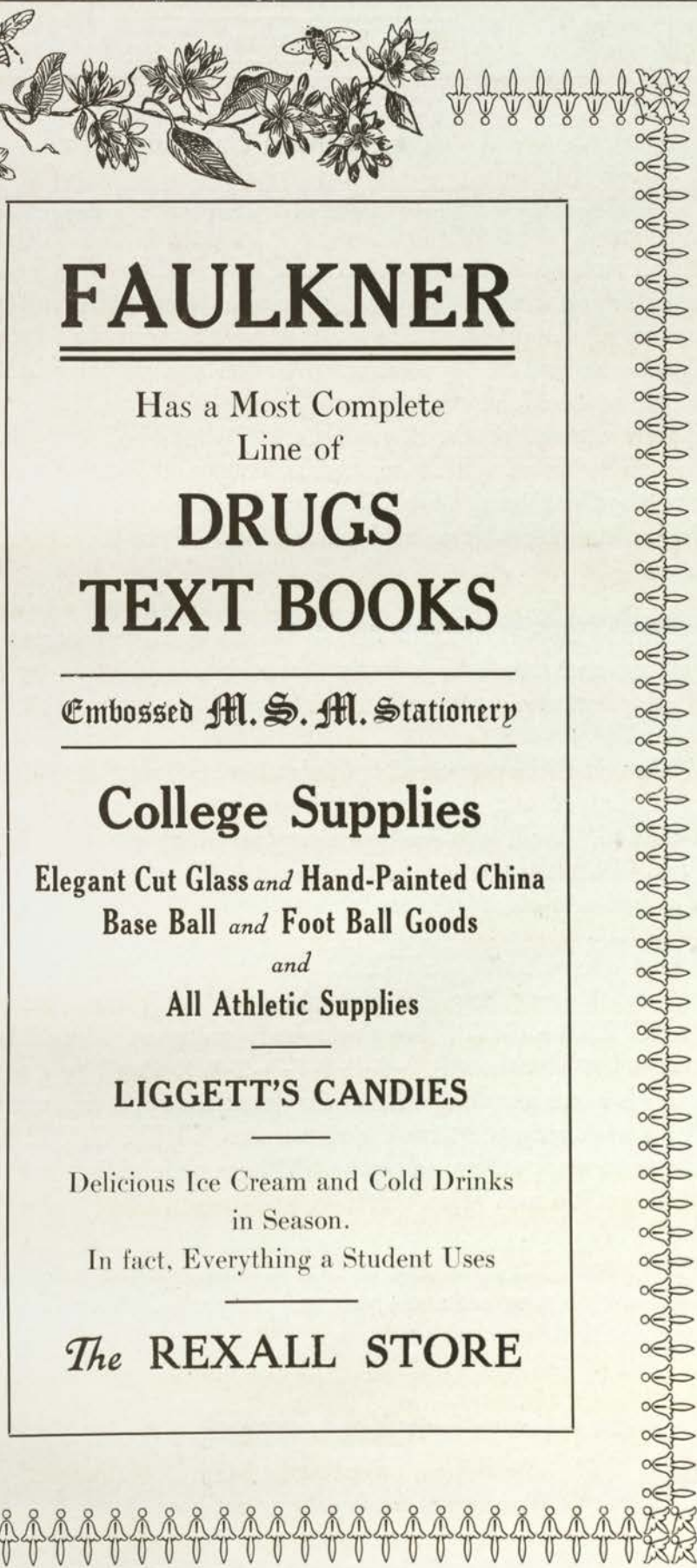
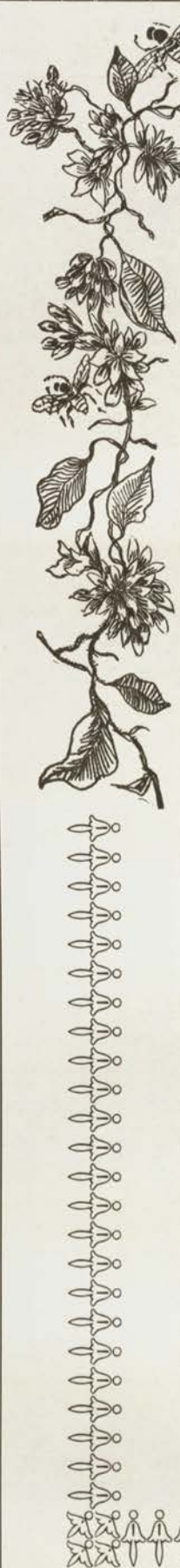
Student: "Rolla beefsteak."

Why is the subject which treats of the milling and separating of ore from the gangue called Ore Dressing?

Answer. Because its "Duds."

(Note). This joke was published by Gaba. If you can't see through it, see him. He will explain it to you. We can't.

Professor Dean (after reading a notice which was headed "Rollamo Board"), "I notice that somebody has knocked -ell out of the Rollamo Board."



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A Lecture in Calculus

The eight o'clock bell has just rung. Prof. Dean comes prancing into his lecture room.

"Bell rung yet?" Seeing only two fellows in the chairs, he asks, "I wonder where the bunch is this morning." Then he takes out his roll-book and checks up the names. Completing this task he wipes his glasses in a very deliberate and thoughtful way and at the same time walks towards the windows. Carefully adjusting his glasses, he gazes across the campus.

"Here comes Brewer. I can't start without him." By this time a pretty good bunch have assembled and work commences. After getting a parabola drawn on the blackboard, "Well, Brooks! What is a radian? Oh! You Monday morning heads! Now sit up and take notice." Here the class is shown what a radian is.

"I see the only way to teach you fellows calculus is with a club. Well! Get it down! Do something! You sit there like a lump of putty on a stump." After giving each student's work a thorough investigation by going from one chair to the next and scratching all mistakes with a blue pencil, he starts for the blackboard.

"Now, you fellows passed up Trig., here is something that the sharks can sharpen their teeth on. I guess that I had better put up some formulas for the feeble-minded. Well, let's see how Drury is getting along. Well! Well! Rose Polly fell. Schssssssssssss. Let's see what Washington U's got. Oh! You bunch of two-year-olds!" There is an interval of silence just preceding another inspection trip.

"Oh! Bug Dust! ROTTEN! Wake up! GREAT CAESAR! I can't expect to teach you fellows calculus when you don't know common arithmetic. YOU ARE THE LIMIT! Now everybody wake up. Here it is (pounding his fist against the blackboard) $\frac{?-*!!-*?-*!!-*?}{?}$, Can't you read? When the numerator is of a higher degree than the denominator, divide until the denominator is of a higher degree than the numerator, THEN STOP!!! I have to tell you fellows to stop, otherwise you would keep on dividing forever. FORGET IT! Well! get it down. Don't sit there and dream. You make me sick. I want to vomit.

"Tomorrow we are going to have a killing and I am going to get some scalps. Bring all your cribs and your rubber-necks. It's going to be crib-proof. That will do for this morning."

To a "Beanery"

There is a steward named Gray,
Who serves for breakfast cut hay,
It's just what his men like,
But they think that it's a Lucky Strike,
When he changes to oats for a day.

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“Baldy” Cox.
“Boyd” Dudley.

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Frank Dennie.
Durward Copeland.

“Ike” and “Kat”

Many times you have heard the name “Kat,”
She is neither tall, buxom, nor fat;
But she’s “there,” just the same,
If you doubt it, ask James—
He’s the man who knows all about that.

Mary and “Mickey”

Mary Shaw teaches school, all the day,
So you see she don’t get time “to play;”
But that good old “Mick” Flynn,
Has announced that he’ll win
Her fair heart. Well! Maybe he may!

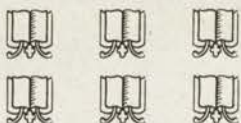
The Two “Robs”

There are two “Robs” in Rolla, we note,
One is “male,” one is not; so we hope
That the one who’s a “he,”
Will propose to the “she,”
So that then they can both be called “Cope.”

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J. Terrence McVey

To those persons who have not heard of J. Terrence McVey it will be necessary to state that he was formerly connected with the Lackawanna Railroad. Those who have heard of him also heard of those good old times, "When I was on the Lackawanna." It is not generally known in what capacity Mr. McVey served on the surveying party, but it is rumored that he started as head chainman and was afterwards promoted to rear-chainman, in which latter position he was found to be much more proficient in keeping the chain taut. At any rate whatever his duty was, he kept his eyes open and he gives his classes the benefit of what he saw.

The class assemble and look expectantly at the figure of J. Terrence seated on the table in front of them. He sleeps on, however, until about ten minutes after the bell. Finally he wakes with a yawn and calls the rolls in a dull monotone. Then a sickly grin spreads over his face and he begins:

"Now maybe I don't know as much about this as some of you do, but I'm just going to show you where the 'errrrrrs' are likely to come in." At this point the words of our professor have reached pianissimo via the *ritardando e diminuendo* route, and at last they become altogether inaudible far down in the secret recesses of his larynx.

"Now, when you lay out—a railroad—curve—you've—got—to—put the—outside—rail—the—highest. One—day—a—fellow—was—laying—out—a—sharp—curve—on—the—Lackawanna—and—he—got—the—outside—rail—TOO—high,—and—I—told—him—it—was—too—high,—and—it—*was—too*. One—day—a—caboose—turned—over—and—it—pretty—near—killed—a—man—and—it—hurt—him,—too. And—I—told—that—fellow—that—that—wouldn't—do—and—it—didn't,—too. And—it—broke—every—pane—of—glass—in—the—caboose,—too."

J. Terrence never fails to give a little talk on some of the engineering problems that have been worked out in Rolla since his coming here. His chief pleasure is telling how the Rolla paving was done.

"There—was—a—big—negro—here—from—St.—Louis—and—he—shoveled—concrete. And—he—could—sure—shovel—some,—too. He—was—sure—black. I—used—to—stand—and—watch—him—work." After this he gets on to the curbing question. "I—started—to—put—in—the—curbing—curved—at—the—corners. But—some—of—these—old—fellows—around—town—knew—that—it—ought—to—go—in—square—and—they—told—me—that—that—was—the—way—to—have—it—done,—and—so—I—had—it—done—that—way. And—I—told—them—that—it—wasn't—the—right—way—to—do—it,—and—it—wasn't,—too. And you go and look at those corners now and you will see all of those square corners broken off and I told them that that was what they would do, and they did, too."

After about three-quarters of an hour of this sort of dissertation on everything from the Lackawanna Railroad to the principle of the middle third in dam construction, the thoroughly exhausted professor announces in fast dying accents, "Well! I guess that'll do for to-day."

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Pipe Dreams

I.

Didst ever in the even-time,
Take down your briar pipe,
Strike matches on your corduroys,
And on the amber bite?

II.

Strange happenings fill the student mind,
As through the fumes of blue
A Vision pleasant is aligned,
All garbed in roseate hue.

III.

For living's worth the while, when each
Small worry drifts and curls
Up to the ceiling, out of reach,
And moulds your college-girl.

IV.

The laughing eyes, the scarlet lips,
Take shape in contour fair,
Another puff, and there uplifts
A bank of curly hair.

V.

She thus reclines on mystic couch,
And stretches forth her hand,
That fades within the lover's grasp,
Into a smoky band.

VI.

She floats up high in hazy fume,
Beyond the touch of man,
And mocks the youth, predicts the doom
Of love in college-land.

VII.

Up, always up, the Vision rides,
But ever out of reach,
The Maiden looks below and chides,
Of love that is impeached.

VIII.

The sweet, fresh lips we fain would press,
Wait quivering on the air,
But soon dissolve—ethereal caress,
They're neither here nor there.

IX.

They're gone to join all other lips,
That coax the heart they broke,
And are safe within the harbor
Of lost dreams, up in the smoke.

X.

The youth unknowing still clings to
This immaterial wraith,
His head and heart are truest blue,
Unshaken is his faith.

XI.

As pipes burn out, then so does love,
The former we relight;
But, ah, the Vision up above,
Has slipped into the night.

XII.

To-night will never come again,
Though other pipes may glow,
And waft a picture now and then,
As up the smoke-wreaths go.

XIII.

So kindle up, old briar friend,
Let's dream once more, be fast,
Before the Girl on high descends,
Let this dream be our last.

XIV.

A few more puffs and all is done,
The gurgle sounds within
Our trusty pipe, the race is run,
The smoke is getting thin.

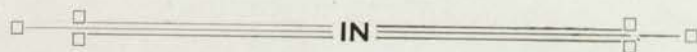
XV.

Alas, the bowl no longer glows,
There but remains the ash,
The fragrant weed is dead, and so
Is college-love so rash.

To Our Co-ed

There was a mining co-ed,
Whom nothing on earth could dread;
When to a fence she'd come,
She'd jump it on the run,
Which proved her a Hirdler, they said.

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A Lecture in Metallurgy

Copeland stands at the door, watch in hand, and watches the delinquents as they wander into the class-room, pacing back and forth like a caged lion. As the last man reaches his seat, Copeland runs through his roll cards at lightning speed, turns a flip-flop or two, runs three laps around his desk, claps his hands together, and commences.

"Now, Mr. Raible, this is for you. What would an ore running one kilogram in Mexico, run in the United States?" He waves his hands, snaps his fingers, and gives an exhibition of fancy dancing until "Doc" gathers himself together sufficiently to answer.

"Very good. I see that I have finally got you fellows to get hold of that. But in about a week I'll spring it again and everybody will get all balled up."

"This morning we will consider a few matters pertinent to the blast furnace. By the way, Mr. Andrus, can you give me a definition for cast iron?"—"Very good. I am running through this rather fast and if I get ahead you want to stop me."

He lectures at high speed with no slow downs at curves for fifteen minutes, accompanying the same with displays of fancy dancing, chalk throwing, stamping back and forth in front of the desk, and similar physical demonstrations.

"Now, is there anyone who has not followed me? Anyone any question? All right. Now the valuable part of the limestone is the CaO and in the blast furnace the limestone breaks up into CaO and CO_2 . The CO_2 steals the coke according to this reaction. Mr. Fogarty, Do you see that? Come on, "Doc," wake up! Is it too hot in here? We had better open the windows." He opens the windows with deafening clatter and drags the model of the blast furnace around in front of the class with more and greater clatter. Some of the fellows move their chairs to see better.

"Gee! I wish that you fellows would get over squeaking those chairs. You could just as well turn around and see just as good. Etc. Etc." He performs with the blast furnace model, winding up the skip, opening and closing the double bell hopper, etc., etc., to the huge amusement of the class, who know that he loves to play with the model. Then follows more 'dope' on the furnace.

"Everybody get that? Get that, Mr. Ham? All right. By the way, Mr. Andrus, what is the weight of a cubic foot of air?—Supposing, Mr. Wright, that you forgot the weight of a cubic foot of air, how could you 'dope' it out?"

Wright: "One cubic foot of air occupies 22.2 cubic ounces.

"I'll now show you by a flow sheet, flow sheet, Mr. Wright; the various steps taken by the iron in being converted from ore into castings and steel." More rapid fire "dope." "Remember this there is a gail of wind in the blast furnace. The weight of the ascending column of air is greater than the descending column of ore, flux, and fuel. Now, does everyone follow me? Do you, Mr. Dennie?"

"We are not going to have any more hour quizzes. On those quizzes everyone writes all that they know and all that they don't know. I am going to give you fifteen minute quizzes unannounced. Hand in those three fifteen-minute problems for tomorrow. Class is excused.

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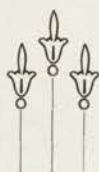
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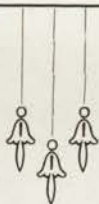
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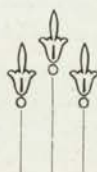


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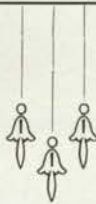


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Question. What is the use of borax in the nail assay?

Answer. It melts and forms a sort of molasses which floats around on top and holds the heat in.

Question. Explain the cause of the polarity of the earth.

Answer. The zenith acts as a resistance within which the earth revolves. This causes currents to pass around the equator and so we have a north and south pole.

Question. What is a ten o'clock in the Wisconsin District?

Answer. Ten o'clocks are certain lumps of ore found in the Wisconsin District, so called on account of their shape.

Question. Same as above.

Answer. The miners mean by a ten o'clock that the dip is in the direction of the sun at ten o'clock.

Question. What is a thrust fault?

Answer. A thrust fault is one where the foot-wall is in the hanging.

Excerpts from Chemistry Quiz Papers

Halogens combine with oxygen, forming oxides and hydroxides.

Take sulphuric acid, for instance, and pour it into water. We have a vigorous action. The atoms try to jump a good deal like grasshoppers.

By synthesis we mean the sign that stands for substances; e. g. O for oxygen.

Compounds are two substances added together to form one class.

Synthesis is by the synthetic process. This method is more like a geometry problem.

The addition of a reagent in excess is making sure that the reagent is the solvent, while the substance to be dissolved is the solution.



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